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 Ratings of TMH Students' Skills
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THE UNIVERSITY OF ALBERTA

Career Education: Parent and Teacher Ratings of TMH
Students' Skills

by

Melody M. Barry

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

Department of Educational Psychology

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THE UNIVERSITY OF ALBERTA
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Career Education: Parent and Teacher Ratings of TMH Students' Skills submitted by Melody M. Barry in partial fulfilment of the requirements for the degree of Master of Education.

To my parents,
for their continuous support
and encouragement

Abstract

In the context of the development of a career education program for TMH students, this study investigated the parent and teacher evaluations of TMH secondary students' developmental level and skills as measured by the *Adaptive Behavior Scale*. Parent and teacher ratings were compared as well as ratings between schools, boys and girls, and work-experience and non-work-experience groups. Present parent involvement in the school program, the desired role of these parents, expectations for the students' vocational future, and views of the school program were also examined. The feasibility of using the *Reading Free Vocational Interest Inventory* with TMH secondary students was also investigated.

The sample consisted of twenty-nine students enrolled in two TMH secondary programs. Parent ratings were available for twenty-two of these students.

There were no statistically significant differences in parent and teacher ratings of students' skills on the *Adaptive Behavior Scale*. Statistically significant differences were found in teacher ratings of Physical Development between schools, and in Language Development between boys and girls.

Parents and teachers agreed on the desired role of parents and on many potential components of the school

program. However, the findings of this study indicated a need for better communication among school personnel and the home to promote program development.

Several difficulties were encountered when administering the *Reading Free Vocational Interest Inventory* and it generally did not identify student vocational interest areas which agreed with parent and teacher ratings of interest. There is still a need to identify instruments useful in assessing TMH students' vocational interests and aptitudes.

The agreement between parents and teachers as to individual student's skills and potential can serve as a basis for career education programming.

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I. Introduction

Special educators have usually defined educational goals in terms of maximizing each child's potential. With strong support from parent organizations, professionals in the field of mental retardation have developed programs ranging from home-based, infant stimulation programs to full day public school classes for retarded individuals. A problem remains in the lack of continuity between home and school programs and the ultimate goals of successful adult adaptation to society. Many retarded adolescents are approaching adulthood without requisite coping skills because there are no clearly defined and developed career education goals and programs.

No mentally retarded person will be successful in employment and adjustment to society unless physically, emotionally, and socially prepared to do so. There is a need to develop programs that will promote growth in these areas. Successful programs must be built on a respect for the individual, a recognition that mentally retarded persons have the same basic needs as other persons, and a conviction that retarded persons are entitled to the same basic rights and treatment afforded any citizens in our society (Ginglend and Carlson, 1977).

A. Background to the Study

Significant changes in the provision of education to the retarded have taken place in the past two decades, the most notable being the de-institutionalization movement and the provision of free, appropriate public school education for all school age handicapped individuals (Williams, 1981).

Despite the strong movement towards community integration of retarded individuals, there are substantial unmet needs in the areas of integrated community living and career education. A primary barrier to community integration is not the skill deficits of retarded individuals, so much as the lack of sufficient numbers of integrated community vocational, residential, and recreational opportunities and the absence of appropriate programs for training in skills necessary to gain access to those opportunities (Williams, 1981).

The career preparation of retarded adolescents has been an area of concern for many years. Work-study programs have become part of many schools' curricula to meet the vocational and community adjustment needs of students preparatory to leaving the school. However, a survey of 2,804 parents and guardians of retarded individuals showed that 84.4% of severely retarded and 59.8% of moderately retarded persons had never held a job (Ginglend and Carlson, 1977). Stacts (1976) estimated that less than 2% of the handicapped school population is being served by vocational education. These figures illustrate the need for the

development of relevant, appropriate programs.

It is not sufficient that the mentally retarded simply fade into the ranks of the unskilled and semi-skilled workers; it is important that they become socially and occupationally prepared to function as contributors within the community setting. Career education, taking a broader perspective than does vocational education, is a total educational concept, providing knowledge, skills, and attitudes that students need for the various life roles and settings they will encounter during their lifetimes. For many retarded individuals, paid employment will not be a major part of their career. Being a contributing member of society for these individuals may mean taking care of themselves and helping at home or in the community. For them, career education would include avocational, family, and civic pursuits (Brolin and D'Alonzo, 1979). The critical issue for the mentally retarded is how to provide career education and control their learning experiences without fragmenting their education to a degree that completion of formal schooling leaves them unprepared for assimilation into the world of work and community living (D'Alonzo, 1977).

Parent and teacher expectations for the child are very important. Parental aspirations with regard to the adult life of mentally retarded children range from unrealistic to no expectations at all about the future (Brolin, 1976). Family attitudes and expectations are of critical importance

to the success of career education programs, and realistic parental expectations are necessary if parental behavior is to be useful in meeting children's needs.

While all persons must be accepted as they are at any given time, growth in knowledge, skills, and attitudes requires that realistic demands be made upon each trainable mentally handicapped child.

B. Purpose of the Study

The purpose of this research was to assess and compare parental evaluations of trainable mentally handicapped secondary students' social, developmental, and vocational skills with the evaluations of their teachers, to determine if parental assessments of their children's skills are comparable with school functioning, as perceived by their teachers.

A second purpose was to assess the degree of parental involvement in the school program, and parental expectations for the future vocational or career activities of their children.

A final purpose was to determine the feasibility of using the *Reading Free Vocational Interest Inventory* (Becker, 1981) to assess trainable mentally handicapped students' vocational preferences.

C. Definition of Terms

Trainable Mentally Handicapped (TMH) -- The American Association on Mental Deficiency (Grossman, 1977) defines this population as having an I.Q. of 36-51 as measured by the *Stanford-Binet*, or 40-54 as measured by the *Wechsler Intelligence Scale for Children*. In the context of this study, the definition reported by teachers as the one utilized by the participating schools is those students with an I.Q. of 35-50 ± 5 or those whose level of functioning, as assessed by a School Board placement team, is such that they will benefit from a trainable mentally handicapped program.

Educable Mentally Handicapped (EMH) -- The American Association on Mental Deficiency (Grossman, 1971) defines this population as having an I.Q. of 55-69 as measured by the *Wechsler Intelligence Scale for Children*.

Vocational Education -- An instructional program which is designed to develop occupational skills at the secondary and post-secondary levels leading to paid employment.

Career Education -- A total educational concept which systematically co-ordinates all school, family and community components together to facilitate each individual's potential for economic, social, and personal fulfillment

Work Experience Program -- A program in which students are placed in a work situation during school time in which they are provided the opportunity to learn the job in which they are placed.

Vocational Interest -- The field or type of occupation in which the individual would prefer to be employed.

D. Overview of the Study

Chapter I has presented an introduction to the problem examined in the study, including the background to the study, a statement of the purpose of the study, definitions, and study overview.

Chapter II is a review of the literature and research related to career education, career education for the trainable mentally handicapped, and the role of parents in education. Research questions conclude the chapter. Chapter III includes a description of the research instruments, the sample, the collection of data, and assumptions made in conducting the study. Chapter IV presents the procedures for analyzing the data, the analysis, and statement of results. Chapter V, the final chapter, summarizes the findings and conclusions derived from the study.

II. Review of Related Literature and Research

A. Introduction and Chapter Overview

Career education is a relatively new educational concept that has no universally accepted definition. For the purposes of this study, the historical development and the varying conceptualizations of career education are presented. A review of the literature related to career education for the handicapped follows.

An in-depth review of career education specifically for the trainable mentally handicapped includes literature and research related to assessment, curriculum, and barriers to the fulfillment of career education for the trainable mentally handicapped student.

The literature on the final dimension, the role of parents in education and specifically in the education of the trainable mentally handicapped, is reviewed. The chapter concludes with a summary and presentation of the research questions.

B. Career Education

History of Career Education

Career education was formally introduced at the United States national level in 1971 by former United States Commissioner of Education, Sidney Marland, at a National

Education Convention in Houston, Texas. Prior to this formal introduction, much work related to what was labelled career education had been under development in the early and mid-1960's (Hansen, 1977). During that time, high dropout rates and high unemployment among youth were viewed as symptoms of the inappropriateness of educational programs. Worker alienation was viewed by many as having its roots in school programs where no apparent relationship existed between what students were asked to learn and what they might do with the information after leaving school (Cullinan and Epstein, 1979).

Education was subjected to criticisms such as:

- it best met the needs of the minority of persons who would someday become college graduates;
- too many persons left the educational system unequipped with the vocational skills, the self-understanding, and the career decision-making skills or the work attitudes that are essential for making a successful transition from school to work;
- that insufficient attention was given to learning opportunities which existed outside the structure of formal education.

There was too much emphasis on bringing students to a certain grade level by the end of the school year, rather than considering the total constellation of developmental skills needed to make the individual a more effective person (Brolin and Kokaska, 1979).

Prior to Marland's speech, the Vocational Education Act of 1963 and its Amendments of 1968 were a major stimulus to and were the forerunners of the career education movement.

The Vocational Education Amendments document was particularly significant for promoting the development of pre-vocational efforts in the elementary and junior high schools, for creating new curricular thrusts in vocational education, and for broadening the scope of vocational education within the educational sector (Brolin and Kokaska, 1979).

As early as 1969, the suggestion had been made that career development theory and knowledge should provide a unifying base for curriculum reorganization (Hansen, 1977). Although Marland did not define the concept of career education in his 1971 speech, he implied that it should involve restructuring the curriculum, a marketable skill for everyone, one hundred percent placement in education or work, and the inclusion of all students, parents and community (Hansen, 1977).

During fiscal years 1971 and 1972, the United States Office of Education (U.S.O.E.) began development of four conceptual models for career education. These were the School-Based, Home-Based, Residential-Based and Employer-Based models and they provided the core of the federal program being designed to further the trend toward career education (Bailey and Stadt, 1973).

The School-Based Career Education Model, developed at Ohio State University, was the first major programmatic attempt to implement the career education concept, advocating an extensive curriculum reorganization for grades kindergarten (K) to XII. This model promoted a sequential

program of career awareness in grades K to VI, career exploration in grades VII to IX, and career preparation in grades X to XII (Hansen, 1977). Its objectives were to help students develop self-awareness and positive attitudes about work, school, and society; personal characteristics such as self-respect, initiative and resourcefulness; a clearer understanding of the relationship between the work-world and education; and entry-level job preparation skills or further educational opportunities (Brolin and Kokaska, 1979). Basic subjects were structured around career opportunities and requirements in the work world using fifteen occupational clusters identified by the United States Office of Education (Hansen, 1977).

Considerable controversy was generated by the School-Based Career Education Model which, for all practical purposes, is no longer in existence (Hansen, 1977). Some of the major criticisms of the model included its use of the fifteen United States Office of Education clusters for curriculum design without taking into consideration other occupational systems and theories; its lack of a theoretical framework; its focus on preparing people to work at the expense of other important educational objectives; and its lack of attention to the affective domain (Brolin and Kokaska, 1979).

The *Home-Based Career Education Model*, developed by the Education Development Center in Providence, Rhode Island, was directed towards adults who are not working or in

school. This model was designed to inform individuals, especially women, about work and training opportunities in the community. A mass media approach has been used to reach and assess the career interests of certain home-based populations (Datta and Reider, 1973).

The *Rural-Residential Model* was developed by the Mountain Plains Education and Economic Development Program. Its major focus has been on multi-problem and chronically underemployed rural families and on providing a wide array of services such as career counselling and guidance, training, remedial education, and homemaking skills. The intent of the model is to make the family financially capable of functioning in their community (Brolin and Kokaska, 1979).

The *Experience-Based Career Education Model*, originally named the *Employer-Based Career Education Model*, has focused on teenage students who are alienated or unmotivated in school (Brolin and Kokaska, 1979). This model is essentially a community and experience-based program for high school students, providing a comprehensive curriculum largely outside the school walls. Major elements have included an emphasis on student involvement in integration of teacher and counsellor roles and sharing these roles with other adults in the community; individualized instruction based on needs assessment; a basic skills component; a life skills component; and a system of accountability (Hansen, 1977). There is a blending of cognitive, affective and

interpersonal relationship skills with career development skills and increased involvement of students with adults. Early formative evaluation of this model has been encouraging with strong parent and community support (Brolin and Kokaska, 1979).

In 1972, many United States Office of Education units became involved in career education. The United States Bureau of Education for the Handicapped began awarding contracts for investigations directed at careers appropriate for handicapped students; the National Institute of Education assumed responsibility for the four models; a Center for Career Education was established; and legislation made career education a requirement in the United States (Brolin and Kokaska, 1979).

The support for career education in the United States was evidenced by the passage of the Career Education Implementation Incentive Act in 1977 (Brolin and Kokaska, 1979). The law authorized 400 million dollars to be spent over five years to infuse career education into school curricula. State education agencies are required to make certain that career education is part of on-going local instruction, not just part of vocational education. Several states have passed specific laws prescribing career education, most states have established a full-time career education staff, and almost everyone has adopted affirmative policy statements (Brolin and Kokaska, 1979).

Definitions of Career Education

Career education was launched without a universally accepted definition or conceptualization. The point of greatest disparity among the various approaches to definition is in the emphasis placed on work (Hansen, 1977). The narrowest conceptualizations define career education solely in terms of preparation for work, whereas the broader definitions envision career education as comprehensive preparation for all aspects of life (Cullinan and Epstein, 1979).

Over the years, there has been much confusion about the distinction between career education and vocational education. Brolin and Kokaska (1979) delineated some of the major differences between the two concepts, as summarized:

1. Vocational education focuses on paid work, career education on paid and unpaid work.
2. Vocational education emphasizes occupational preparation while career education emphasizes preparation for life.
3. Vocational education meets the needs of the labor market and career education meets the needs of the learner.
4. Vocational education is defined in terms of courses and is an instructional program generally taught by vocational educators; career education is a system-wide effort taught by all educators.

Perhaps the most conservative definition of career education was advanced by the former Executive Director of the United States National Council on Vocational Education when he stated, "There is nothing mysterious or esoteric

about career education. If it means anything at all, it means preparing for entry into the world of work. We can theorize it to death or we can get down to the business of giving people job skills." (Dellefield, 1974).

The United States Office of Education definition emphasizes preparation for work as one major goal of education. Career education is defined as "the totality of experiences through which one learns about and prepares to engage in work as part of his or her way of living" (Hansen, 1977).

These definitions focus on work as paid employment and resemble the definitions of vocational education. They herald career education as leading to increased employability skills for students, revitalization of the work ethic, and increased economic productivity (Hoyt, 1977).

In rejecting the narrowness of this approach, many individuals and groups have developed more encompassing conceptualizations of career education. Some have viewed career education as a means for attaining individual self-development through the clarification of values, needs and goals, with work being only one of many ways in which the individual interacts with the environment. Others have extended this conceptualization to education for all life (Cullinan and Epstein, 1979).

Super's broad definition of career is compatible with the more comprehensive conceptualization of career

education. He defines career as "the sequence of major positions occupied by a person throughout his pre-occupational, occupational and post-occupational life; including work related roles such as those student, employee, and pensioner, together with complementary avocational, familial, and civic roles" (Cullinan and Epstein, 1979, p. 196).

Brolin (1977) viewed the term "career" as connotating many settings, roles, and events such as worker, learner, consumer, citizen, family member, and social-political human being. The definition of career education based on this conceptualization is "a total educational concept for systematically co-ordinating all school, family, and community components to facilitate each individual's potential for economic, social, and personal fulfillment" (p. 155).

Goldhammer (1972) identified several life careers in which individuals engage as members of society. He indicated that five such careers should constitute the framework within which all curriculum content should be organized. These categories include:

1. --a producer of goods or a renderer of services;
2. --a member of a family group;
3. --a participant in the social and political life of society;
4. --a participant in avocational pursuits;

5. --and a participant in the regulatory functions involved in aesthetic, moral and religious concerns.

The Council for Exceptional Children (1977) position statement described career education as the "totality of experiences through which one learns to live a meaningful, satisfying work life...providing the opportunity for children to learn, in the least restrictive environment possible, the academic, daily living, personal-social, and occupational knowledges and skills necessary for attaining their highest levels of economic, personal, and social fulfillment. The individual can obtain this fulfillment through work (both paid and unpaid) and in a variety of other societal roles and personal roles and personal life styles...student, citizen, volunteer, family member, and participant in meaningful leisure-time activities" (Brolin and Kokaska, 1979, p. 102).

Finally, while it is difficult to obtain consensus on definitions of career education, a modified definition has been presented by Hansen (1977), "Career education is a person-centered, developmental, deliberate and collaborative effort by educators, parents, and community with business-industry-labor-government personnel to systematically promote the career development of all persons by creating experiences to help them learn academic, vocational and basic skills, achieve a sense of agency in making informed career decisions, and master the developmental tasks facing them at various life stages

through curriculum, counselling and community" (p. 8).

Career Education for the Handicapped

Career education for the handicapped has made rapid strides since the concept was introduced in 1971. In 1973, the Council for Exceptional Children jointly sponsored with the American Vocational Association a *National Topical Conference on Career Education for Exceptional Children and Youth*. This conference was important because it launched career education at the United States national level for handicapped individuals (Brolin and Kokaska, 1979).

In 1974, Edward Martin, the Deputy Director of the Bureau of Education for the Handicapped in the United States Office of Education, advocated redefining the basic instructional services to handicapped students so they received more employment directed vocational programs, and proclaimed that, by 1977, every handicapped child who left school would have career education relevant to the job market, meaningful to his career aspiration, and realistic to his fullest potential (Brolin and Kokaska, 1979).

In 1975, the United States Bureau of Education for the Handicapped sponsored an important conference for leaders in the field of handicapped education where a list of top-priority needs in career education for the handicapped were identified and have since served as the focus for this Bureau (Brolin and Kokaska, 1979).

The passing of the United States Education for All Handicapped Children Act (Public Law 94-142) had many implications for securing funds for career education programming. Essentially, the law requires that a state must provide a free, appropriate education for all children including the handicapped. This education must be provided in the least restrictive environment feasible and it must be appropriate to the individual needs of the child. Although the law does not specify career education, its acceptance as appropriate for non-handicapped children mandates its inclusion in the educational programs of the handicapped (Cullinan and Epstein, 1979).

A position statement by the Council for Exceptional Children (Brolin, Cegelka, Jackson, and Wrobel, 1977) emphasizes the encompassing nature of career education as preparation for all aspects of adult life. It addresses the career education needs of all exceptional individuals from the most severely impaired to the gifted and talented, and stresses the inclusion of career education objectives in the individual education plans. The programs must include:

1. non-discriminatory, on-going assessment of career interest, needs and potential;
2. career awareness exploration, preparation, and placement experiences in the least restrictive school, living and community environments;
3. specification and utilization of community and other services related to the career development of exceptional individuals;
4. and involvement of the parents or guardians and the

exceptional student in career education planning.

The position statement does not view career education as separate from the total curriculum, but rather as permeating the entire school program.

The Council for Exceptional Children appointed a Study Committee which listed ten objectives of Career Education for Exceptional Children. Cullinan and Epstein (1979) cited these as:

1. To help exceptional students develop realistic self-concepts, with esteem for themselves and others, as a basis for career decisions.
2. To provide exceptional students with appropriate career guidance, counselling, and placement services utilizing counsellors, teachers, parents and community resource personnel.
3. To help students know and appreciate the many changing avocational, domestic and civic outlets for developed interests and abilities, outlets which in an automated society often supplement, complement, or even supplant paid work in making a satisfying career.
4. To provide the physical, psychological, and financial accommodations necessary to serve the career education needs of exceptional children.
5. To infuse career education concepts throughout all subject matter in the curricula of exceptional children in all educational settings from early childhood through post-secondary.
6. To provide the student with the opportunity to leave the school program with an entry level saleable skill.
7. To provide career awareness experiences which aim to acquaint the individuals with a broad view of the nature of the world of work, including both unpaid and paid work.
8. To provide career exploration experiences which help individuals to consider occupations which coincide with their interests and aptitudes.
9. To provide exceptional individuals programs with

occupational preparation opportunities for a continuum of occupational choices covering the widest possible range of opportunities.

10. To help insure successful career adjustment of exceptional students through collaborative efforts of school and community. (p. 161)

Brolin and D'Alonzo (1979) have identified several critical issues in career education for the handicapped which need to be resolved for effective implementation in the schools. The first two issues deal with the questions that are relevant to career education in general, namely whether career education should be primarily job-centered or life-centered, and whether career education is a separate program or permeates the educational process.

A third major issue concerns ultimate responsibility. The question is whether the special education teacher is still primarily responsible for the handicapped student or whether this responsibility should be shared among all school personnel. Although the career education approach advocates a shared responsibility, special educators will likely need to continue assuming the responsibility with collaboration from parents and other school personnel (Brolin and Kokaska, 1979).

A fourth issue is the concern with whether career education for the handicapped aids or impedes the mainstreaming process. Many teachers may fail to implement career education because they are concerned about accommodating handicapped students in regular classes and services while maintaining individualized education

programs. They may not realize that handicapped students often learn best by relating instructional material to the real world and, thus, hands-on experiences in career education may serve to enhance the assimilation and achievement of handicapped students in their classrooms.

Another issue relates to what to do with former courses and teaching approaches. Educators may feel it is necessary to abandon their educational objectives and methods. Career education requires modification of courses, elimination and addition of materials, and new teaching approaches, but it does not de-emphasize the fundamentals.

The important area of personnel preparation is a sixth issue. The concept of career education needs to be integrated into university training programs. Special education departments as well as the education departments which train regular teachers, counsellors, and administrators have to respond to the need to include career education in the training of school personnel. An effective inservice delivery system for teachers already in the field is also a concern for realizing career education for handicapped students.

Brolin and D'Alonzo call for a resolution of these issues and a redirection of special education efforts to fulfill the total needs of handicapped citizens. For many handicapped individuals, paid employment will not necessarily be a major part of their career. These individuals will need to learn to function adequately in

avocational, family, and civic pursuits in order to lead a satisfying, meaningful, and productive life. This, in essence, is their career, and thus, the focus of career education depends on each individual's abilities, needs and interests (Brolin and D'Alonzo, 1977).

C. Career Education for the Trainable Mentally Handicapped

Career education programming for the mentally retarded has not kept pace with the total number of career education programs in the United States. Most programs in existence do not include opportunities for the mentally handicapped. Because the main focus of this study is the trainable mentally handicapped, career education for this group is examined in depth.

The development of curriculum for TMH students is particularly difficult because teaching them is a complex task. Gearheart and Litton (1975) suggested that the major problems related to curriculum development for the trainable mentally retarded include a lack of a clear guiding purpose in education and training; lack of agreement between parents and educators regarding worthy educational objectives; and lack of a systematic instructional program appropriate in scope of educational activities.

A systematic process of assessment can be a step toward resolution of these problems (Burton, 1976). Burton stated that the process of assessment presents a predictive statement about the levels of expectancy of performance in a

given area and should be the antecedent to program development.

Assessment of the Trainable Mentally Handicapped

Different categories of tests are appropriate when assessing the mentally handicapped. To properly educate and rehabilitate the mentally handicapped, Riggan and Riggan (1980) stated that data needs to be secured in six general areas: intellectual, physical, social, educational, psychological, and vocational. In actuality, it is rare when a complete battery is administered at one time as part of any program (Riggan and Riggan, 1980). Alberta Education (1981) suggested intellectual, academic functioning, social functioning/behavior, and vision and hearing assessments before enrollment in a special education program. Assessment that obtains functional baselines must continuously be used to modify the training that the student receives.

The initial assessment and on-going evaluation of student progress is a career education issue that must be addressed. There is a critical shortage of vocational counsellors who have been properly trained to use assessment procedures in pre-vocational and vocational programming for the handicapped adolescent. Traditionally, vocational counsellors have employed psychometric or work-analysis procedures to specifically desired programs. Standard assessment devices do not provide valid data for handicapped clients (Olshansky, 1973), because the disability alters the

results of the standardized assessment procedures not adapted to the handicap and measures the handicap, not the person's potential (Cullinan and Epstein, 1979).

Vocational assessment of the mentally retarded is particularly difficult because many general aptitude, personality and other vocational assessment instruments are not applicable to these individuals. Reading level, short attention and interest span are some of the problems that an examiner encounters when attempting to use instruments not specifically designed for the retarded (Alcorn and Nicholson, 1975).

Assessment instrumentation to determine occupational interests of the mentally retarded has lagged behind more traditional types of vocational evaluation because most mentally retarded individuals have not been considered seriously for competitive employment; the general attitude has been that the mentally retarded individual does not have the ability or the social maturity to make valid occupational choices; and a lack of appropriate instrumentation regarding reading levels and occupational choices (Timmerman and Doctor, 1974).

Burg and Burnett (1965) developed a set of verbal descriptions to accompany a standardized interest instrument, the *Geist Picture Interest Inventory* (GPII). These descriptions were developed because the authors found that, in assessing the interest of mentally retarded persons, tests requiring even a minimum of reading ability

were unrealistic and responses were frequently to specific people or items within a picture rather than to the occupation illustrated. Hahn (1965) criticized the GPII because reliabilities are not convincing, validity is questionable, and no systematic approach is presented regarding the composition and size of standardization samples. Other authors report that no validity has been established for this approach (Stodden, Ianacone, and Lazur, 1979).

The Vocational Interest and Sophistication Assessment (VISA) was designed specifically for a mentally retarded population. For the interest portion, the client is shown a line drawing and asked if he or she would like to perform the work "a lot", "a little" or "not at all". Timmerman and Doctor (1974) pointed out several problems with use of the VISA. The simple response format often does not discriminate between job areas, some of the drawings are ambiguous as to what the job is, and a small number of fields are illustrated. Domino (1978) did not recommend use of the VISA because the manual gives no data on reliability and validity, no information is provided on the normative sample, and no indication is given of how the VISA was developed or how the interest areas were obtained. He further urged potential users to look at other inventories such as the *Reading-Free Vocational Interest Inventory*. Positive aspects of the VISA are: it gives appropriate jobs in simple line drawings; it attempts to deal with the

problem of lack of job recognition; and it is not a forced choice between pictures (Timmerman and Doctor, 1974).

The Wide Range Interest Opinion Test (WRIOT) requires no reading. The client responds to the most and least liked picture of 150 sets of three pictures. The WRIOT was normed on the general population which makes its use with the mentally retarded questionable, and the length of the test is excessive for those with limited attention spans (Stodden et al, 1979). Zytowski (1978) criticized the WRIOT because no details of analysis for formation of the scales are available, no reliability co-efficients have been established for retardates, no validity is reported, and there are problems of interpretation.

The Reading-Free Vocational Interest Inventory (RFVII) was developed by Becker (1973, 1979, 1981) to assess the vocational choice of educable mentally retarded subjects. Fifty-five picture triads are presented in a group administration and the examinee is instructed to select the one occupational activity she or he would like most to do. The instrument provides scores in eleven interest areas representative of the types of occupations in which the mentally retarded are productive and proficient (Becker, 1981). Norms based on 2,132 educable mentally retarded males and 2163 educable mentally retarded females from public school systems in thirty states in the United States are provided.

Test-retest reliability was established and validity was obtained with concurrent testing using the *Geist Picture Interest Inventory* (Becker, 1981). Drugo and Cohen (1977) found that when the RFVII was administered to all ninth grade educable mentally retarded students in the Pittsburgh Public School System, the RFVII educable mentally retarded public school norm group table accurately reflected the distribution of scores for their population.

Diamond (1978) noted that the trainable mentally handicapped were not involved in the development of the RFVII and recommended research to study the usefulness of redesigning and norming the instrument for this group. Becker (1973) recommended further use of the inventory and tryout with populations such as the trainable mentally retarded to determine the feasibility of the design. In a five year follow-up study, Becker, Schull, and Campbell (1981) used the performance on the RFVII of fifty TMH adults ages eighteen to forty-one, to measure the inventory's predictive validity. The data showed that of eighteen males and fourteen females who were placed in one of their top three inventoried interest scales, all were still employed in the same occupational field five years later. On this basis, they concluded that the inventory predicts successful job placement.

Drugo and Cohen (1977) conducted a study in which the RFVII was administered to forty TMH students aged sixteen to twenty-one by their classroom teachers. The teachers were

reported to have felt that the instrument was practically useless with this population and they did not recommend its further use. An analysis of the number of invalid profiles attained (approximately fifty percent) confirmed the teachers' perceptions. The RFVII has also been criticized because it presents only limited forced choice career areas which may or may not be appropriate for mentally handicapped persons.

Most researchers have investigated interest assessment with populations of educable retarded children and youth. The current lack of studies dealing with TMH individuals suggests that researchers have yet to seriously consider interest assessment to be important in the career education of this population. (Becker et al, 1981).

Growth in programs has led to a renewed interest in adaptive life skills as a core component of training (Irvin, Halpern and Reynolds, 1977). Since the American Association on Mental Deficiency (Grossman, 1977) included adaptive behavior as a necessary component in the definition of mental retardation, it is mandatory, *in the United States*, that the psychological evaluations of children being assessed for placement in programs for the mentally retarded include such a measure. *Adaptive Behavior* is defined as the degree to which the individual is able to function and maintain himself independently, and the degree to which he meets satisfactorily the culturally imposed demands of personal and social responsibility (Grossman, 1977).

Widespread use of the *AAMD Adaptive Behavior Scale* has been well documented (Nathan, Millham, Chilcutt and Atkinson, 1980). Foster and Nihira (1969) have shown that the *Adaptive Behavior Scale* discriminates behavior levels more effectively than the more conventional I.Q. assessment of functioning levels, and the scale has proved to be a useful tool in program evaluation (Foster and Foster, 1967). Bogen and Aanes (1975) developed a system which utilizes the *Adaptive Behavior Scale* to establish short range goals, long range goals, and the intermittent steps to develop priorities and sequences based on peer groupings derived from normative data of the scale. They found that the *Adaptive Behavior Scale* can be used to objectively identify needs of both individuals and groups of individuals, meet those needs, and evaluate the program's success.

To aid school personnel in obtaining information concerned with a child's adaptive behavior, Lambert, Windmiller, Cole and Figueroa (1975) altered the revised *AAMD Adaptive Behavior Scale* that had been developed for use with institutionalized populations. They eliminated all items that did not pertain to school and behaviors that could not be observed at school. This *Public School Version* of the Scale was then standardized on 2,600 California School children. A statewide field test of this version in Florida (Bureau of Education for Exceptional Students, 1977) validated the results of the original study.

The scale is composed of two parts. Part One is organized along developmental lines and is designed to evaluate an individual's skills and habits in nine behavior domains considered important to the development of personal independence in daily living. Part Two provides measures of maladaptive behavior related to personality and behavior disorders.

Lambert (1979) demonstrated that Part One of the scale was valid for differentiating adaptive behavior levels and concluded that domain scores derived from the Public School Version of the *Adaptive Behavior Scale* are valid for differentiating regular from retarded students.

Curriculum for the Trainable Mentally Handicapped

The ultimate goal of education might be said to be the production of a reasonably happy, well adjusted, contributing member of society. However, in the past few decades, education has become synonymous with reading, writing and arithmetic (White, 1976). As noted earlier, it has generally been accepted that programs for TMH students should be something other than education programs and that an academic orientation is inappropriate (Burton, 1974). However, Burton (1974) noted that academic instruction has persisted within TMH programs.

Work-study programs have proven to be an effective alternative with mentally handicapped students. Chaffin, Spellman, Regan and Davison (1971) found that students who

had participated in a work-study program were graduated more often, held their jobs longer and earned more money than did the students from the comparison group who had not experienced a work-study program. Programs for TMH students have provided both work training and paid work experience with local industries (Gearheart and Litton, 1975). For example, the Bryant School program in Spokane, Washington offers job training opportunities for sixteen to twenty-one year old moderately retarded students and provides a site trainer to coach the student on the job until he or she is thoroughly familiar with the requirements (Rowe, 1980).

The efficacy of teaching higher level cognitive skills to lower level retarded persons has been a source of professional controversy in the past (Hirshoren and Burton, 1979). D'Amelio (1971) stated that the trainable can and should learn academic skills such as reading, writing and arithmetic, and that the designation "trainable" does not do justice to the child's potential. In contrast, Warren (1963) provided empirical evidence to support the concept of non-academic training. From a study of 177 TMH persons who had five or more years of academic instruction, she determined that slight gains could be obtained from instruction in reading and arithmetic, but these gains were made at a high cost in terms of time and were relatively useless in terms of their ultimate prognosis.

Despite the controversy that has centered on the content emphasis of TMH programs, evidence tends to

recommend a non-academic approach rather than a program of traditional education (Burton, 1976). The Alberta Education Curriculum Guide for the Trainable Mentally Handicapped (1981) agrees with this viewpoint when it states that the TMH student is unlikely to achieve greatly in the academic area, but will benefit from instruction in the living/vocational skills area. The Guide adds that TMH students may become effective in utilizing a functional vocabulary and may be able to learn how to budget money fairly effectively with adequate training.

The professionals concerned with providing public school instruction for TMH students generally agree that the major educational training goals are personal, social, basic academic and vocational (Geiger, Brownsmith and Forgnone, 1978) although agreement has not been reached on the specific skills needed to ensure achievement of these goals. Alberta Education (1981) cites the goal of education for the TMH student as training in living skills enabling them to attain most of the skills required to live effectively within the environment. The aim is to ensure that they live as normal a life as possible in a regular environment, and that with adequate training, they will be able to perform at a reasonably high level in personal, social, vocational and allied areas.

Numerous curriculum guides for the TMH student exist, differing in content area. The major curriculum content areas that are common to most are:

self-help skills,
communication skills,
personal-social skills,
perceptual motor/physical education skills,
functional academic skills and
economic usefulness/vocational skills (Gearheart and
Litton, 1975).

The Alberta Education Trainable Mentally Handicapped Guide (1981) presents three major sections:
living/vocational skills, communication and computation. The
latter two domains are to be integrated with the
living/vocational skills utilizing practical applications.

The living/vocational skills section is intended to
develop skills and attitudes which will enable the TMH
student to function as optimally as possible in his own
home, within the school and in the community. Ten topics of
instruction are included: understanding self and getting
along with others, travel, health, safety, world of work,
home management, money management, motor development and
physical activities, fine arts and individual expression and
citizenship and individual responsibility. For each topic of
instruction, there are student objectives which are
developmentally sequenced in four levels. Strategies are
suggested for implementing the objectives, but they are not
all-inclusive. For example, some sample activities are
provided which may be used to teach a certain objective, but
they need to be adapted or changed to fit the individual

student, so implementation is left to the teacher.

The communication section was designed to allow for development of functional skills whenever possible. Functional skills are defined as "those skills which directly relate to the student's present age, environment and needs, and which will allow the student to function in the community in a meaningful, relevant fashion" (Alberta Education, 1981). The functional listening, viewing, speaking, reading, writing, and spelling skills that are necessary to achieve the objectives in the living/vocational section are defined.

The computation section of the guide includes four units of instruction which are: shapes and positionals, numbers, operations and measurement. It is recommended that the skills be reinforced by practice in the environment for transference.

Barriers to the Fulfillment of Career Education for the Trainable Mentally Handicapped

Application of the career education concept for TMH children has pointed out serious barriers to its fulfillment. Most programs which do exist in the schools are primarily for the educable mentally retarded (Becker, Widener and Soforenko, 1979). Trainable retarded children are generally prepared for placement in a sheltered workshop or sheltered community employment.

The career education structure most commonly accepted, the Experience Based Model, does not take into account or

provide for the developmental patterns of the mentally retarded. The social-emotional and cognitive lag of these students does not coincide with the hierarchical structure of the career education components. The lack of career experiences at the elementary level compounds the problem of special educators at the secondary level in trying to prepare these students for work. The secondary level personnel are placed in the position of trying to develop appropriate career entry skills in a short period of time (Brolin, 1977b).

The teacher is perhaps the most critical variable that affects learning for the retarded child (Gearheart and Litton, 1975). TMH students have not been afforded consideration in the planning of teacher training programs in the past (Cox, 1971), and while an increasing number of states in the U.S. now have teacher certification for the TMH population (Gearheart and Litton, 1975), Alberta has no such requirements. There is clearly a lack of information for, and education of professional teachers and counsellors concerning such programs. It is necessary to educate and train professionals who will provide assistance to mentally handicapped students in attaining a normalized existence (Riggar and Riggar, 1980).

As noted earlier, vocational counselling is an element that is missing from present programs for trainable mentally handicapped students. Reiter and Whelan (1975) found that counselling proved effective with mentally retarded young

adults in the areas of dissemination of occupational information and development of vocational interests. They recommended that vocational counselling should be an integral part of any rehabilitation program. Brolin (1976) supported this view and stated that vocational counselling with the retarded is a highly appropriate and necessary technique in their career development.

D'Alonzo (1977) described factors beyond the control of the mentally retarded which restrict their employment. These are employer attitudes and misconceptions toward the mentally retarded; the presence of architectural barriers at work, at living facilities, to public transportation; difficulties encountered by the retarded regarding insurance, workers' compensation, physical examinations; and modifications to equipment and machinery. He further stated that success in the community, by the mentally retarded, can be directly attributed to intense instructional periods within structured programs and organized systems such as career education.

Becker et al (1979) conducted a survey of TMH school personnel to identify work-related problems of job placement and failure. The major problem areas identified showed the need for substantially more involvement by local and federal agencies in meeting training needs of TMH students. In support of this view, Brown, Bellamy and Perlmutter (1972) noted that impediments to the retarded's gainful community employment may be more closely related to training

inadequacies and to the arrangement of events in the work environment than to deficits in the individuals. They contended that current evidence supports the conclusion that the job requirements of many community vocational settings are within the capabilities of retarded individuals.

Professionals involved with the mentally retarded agree that most TMH students could benefit from career education if the programs meet the criteria of a good educational system for the retarded (D'Alonzo, 1977). These criteria are: individualized, sequential, developmental, goal-directed and subject to evaluation and change (D'Alonzo, 1977).

D. The Role of Parents in Education of the Trainable Mentally Handicapped

Two of the strongest influences on a child are the school and home. Consequently, close co-operation between the two should enhance the growth and development of the child. The importance of a link between the family and the school has been well established (Schmid, Moneypenny and Johnston, 1977). Parental attitudes, values and goals concerning education have a strong impact on the child.

Kelly(1973) pointed out that there has been a major transformation in how the relationship between home and school is perceived. In the past, parents have not been regarded as useful contributors to the educational process; more extensive parental involvement in the schools is now

viewed as essential by many educators. This change of attitude stems from a variety of sources. Professionals in early childhood education (Calvert, 1971), the education of the disadvantaged, and in special education (MacDonald, 1971) have found that parental involvement facilitates the effectiveness of their programs.

Although many professionals in both general and special education view parental involvement as a potential solution to pressing educational problems, there are many others who object to extensive parental involvement. Kelly (1973) cited the reasons for these objections as being the complexities of the modern educational process, and the commonly observed phenomena of parental indifference.

In contrast, several rationales support parental involvement in the schools. Parent groups have grown to a point at which they can affect political and social action. Brolin and Kokaska (1979) listed several purposes that parent groups have served such as organizing educational facilities when public schools were unavailable, promoting research in education and sponsoring training for teachers and other individuals involved with education.

The most basic education of children takes place at home. What is taught in school becomes meaningful only when parents are interested and involved in their child's school learning (Kelly, 1971).

Voelker (1967) suggested that educators recognize the importance of co-operation and understanding between the

home and school and that when parents and educators possess a mutual appreciation of the role each has to play in the education of the child, opportunities for development are increased.

Research supports parental involvement in many aspects of the regular instructional process (Felman et al, 1973; Kelly, 1973; Kingsley, 1971). Calvert (1971) noted that professionals in early childhood education have consistently found that parental involvement facilitates effective preschool programs. McCandless (1967) stated that when parents shirk the responsibility of being involved in their child's education, they jeopardize the educational future of their child by profoundly affecting the child's attitude toward the educational process.

A similar trend favoring parental involvement can also be noted in the literature of special education. Kelly (1973) emphasized that if parents are not involved in the school program, they will continue to contribute to their child's problems. MacDonald (1971) suggested that educators may be more effective if they try to work in partnership with parents for the betterment of the child's handicapping condition. Abramson (1979) supported this view and noted that intervention efforts that take place only in the school often have little long-term effect. Brolin and Wright (1971) found that the family influence was important in implementing rehabilitation recommendations for the mentally retarded and program efforts in mental retardation have been

successful through parent counselling (Appell, William and Fishell, 1964) and use of a home behavior program (Feldman et al, 1973).

Several authors have suggested that parents should be involved in shaping educational objectives for exceptional students, be provided with a realistic management plan and be made aware of their children's abilities and assets as well as their disabilities and deficiencies (Brolin and Kokaska, 1979; Gorham, 1973; Feldman et al, 1973). Gorham (1973) stated that parents have the right to understand their child's diagnosis and reason for educational placement. She further contended that no changes in educational placement should take place without parental consultation.

Much of the Congressional discussion during passage of P.L. 94-142 in the United States focused on the need to include parents in making decisions about their child. The legislation requires that a joint planning conference be held at least once a year including parents, and allows the parent to obtain an independent educational evaluation at public expense if the school's assessment is deemed inadequate or discriminatory (Cullinan and Epstein, 1979).

Alberta Education (1981) stated that it is important that parents are involved at a very early stage in the education of their handicapped child and that they need to be involved in an individual manner in the development of programs for their own child. They suggested that

co-operation between the home and school should be established and that some means should be found by which the teacher works closely with the parents as direct involvement of the teacher with the home is considered to be essential.

The importance of parents' attitudes and expectations cannot be underestimated (Farrall, 1970). Although, in general, the attitudes of parents of handicapped children are positive and accepting, Brolin and Kokaska (1979) noted that many parents have underlying resentment, rejection or guilt feelings and some develop such negative feelings and low expectations that the child is not reinforced to use his or her fullest potential. Several authors have concluded that parental difficulties in dealing with their retarded children include protective and possessive concern that can lead to unrealistic expectations and low future aspirations for their children (Brolin, 1976; Farrall, 1970; Hutt and Gibby, 1979). Hutt and Gibby (1979) described a study by Schulman and Stern in which the researchers found that some parents overestimated and some parents underestimated the developmental level of their retarded children.

Counselling for these parents to enable them to be supportive and assist their children has been suggested by many authors (Brolin and Wright, 1971; Farrall, 1970; Feldman et al, 1973; Weisenstein, 1977). Gearheart and Litton (1975) stated that counselling with TMH parents has been effective in producing a needed change of attitudes and in changing the goals of parents from immediate and

short-range goals, to more sophisticated and long-range goals.

Parents and teachers do not appear to always have the same perceptions of the abilities of mentally retarded children. Rosenberg (1979) compared teacher and parent predictions of performance with actual performance on specific tasks and found teachers to be relatively better predictors of student competence. Parental attitudes towards their mentally retarded children were explored by Condell (1966), who found that there was a marked divergence from reality in the parents' attitudes and a discrepancy between the opinions of the persons working professionally with the child and the opinions verbalized by the parents.

Mealor and Richmond (1980) compared teacher and parent ratings of adaptive behavior on two scales, the *Adaptive Behavior Scale* and the *Cain-Levine Social Competency Scale*. The two instruments were completed by teachers of sixty moderately and severely retarded students who ranged in age from seven to thirteen and had intelligence scores between twenty-five and fifty. The parents were interviewed to complete both forms. The Self Help subtest of the *Cain-Levine Scale* revealed a statistically significant difference between parent and teacher ratings for the children, and the *Adaptive Behavior Scale* showed significant differences in the areas of Independent Functioning, Physical Development, Economic Activity and Vocational Activity.

In summary, parents have begun to view themselves as being capable to deal with their children and as being potent forces in their children's education (Feldman et al, 1973). Vigorous efforts towards including parents on an equal basis are being called for (Brolin and Kokaska, 1979; Feldman et al, 1973).

E. Summary

Research indicates the need for further investigation of vocational assessment techniques and training opportunities for TMH students. For example, the findings of a placement survey by Becker, Widener and Soforenko (1979) showed that job training opportunities for TMH youth are expanding to include competitive community employment. However, the researchers noted that in comparison to job opportunities available to educable mentally retarded youth, there is a marked reduction in the type and kind of job placement.

The career education concept may be an appropriate model to increase the TMH secondary student's social, developmental and vocational skills. Important components of implementing a career education program for these students are assessing the student's current level of functioning, determining parental expectations for the future and assessing the student's vocational preferences.

Since research has shown that the family is important in implementing habilitation recommendations (Brolin and

Wright, 1971), that parents' attitudes and expectations for their children are important (Farrall, 1970), and that parental involvement in special education is desirable; a key question is how parental assessments of their children's skills compare to school functioning. In addition, what expectations do parents have for the future career or vocational activities of these children and how are parents involved in the education program to fulfill these expectations?

There is currently no instrument available specifically designed to assess the vocational preferences of TMH individuals. The successful use of the *Reading Free Vocational Interest Inventory* with an educable mentally handicapped population has led to the suggestion that this instrument may be a useful tool in determining TMH students' vocational preferences. Is the RFVII, in its present form, a feasible instrument to use with TMH students?

F. Research Questions

Research Question 1

Are parent evaluations of trainable mentally handicapped secondary students' developmental level and skills, as measured by the Public School Version of the *Adaptive Behavior Scale*, Part One (Lambert, Windmiller, Cole and Figueoroa, 1975), comparable to the evaluations of their teachers? Related questions are whether there will be

differences in the parent ratings as well as teacher ratings between the students of the two different schools, between boys and girls, and between students who have had work experience placements and those who have not had these placements.

Research Question 2

To what degree are parents of TMH students involved in the school program and what future expectations do these parents have for their children? A subsidiary question relates to parents' concerns regarding their child's educational program.

Research Question 3

Can the *Reading Free Vocational Interest Inventory* (Becker, 1981) be successfully administered to trainable mentally handicapped students and do the results accurately reflect the students' vocational interest?

III. Methodology

This chapter delineates the study, including a description of the instruments employed, the sample, collection of data and assumptions of the study.

A. Description of the Instruments

The Reading Free Vocational Interest Inventory--Revised

As described in Chapter Two, the *Reading Free Vocational Interest Inventory* was designed by Becker (1981) as a non-reading vocational preference test for use with mentally retarded and learning disabled persons from age thirteen to adult. Fifty-five pictorial triads of occupational illustrations are presented in a forced choice format. In each triad, the examinee is instructed to select the one occupational activity he or she would most like to do, leaving the remaining two items unscored. Through the use of the forced-choice approach, individuals rank each of the three items in every triad and select the single item per triad as the activity liked best.

The *Inventory* provides scores in eleven interest areas for males and females. The areas are listed as:

1. Automotive
2. Building Trades
3. Clerical
4. Animal Care
5. Food Service
6. Patient Care

7. Horticulture
8. Housekeeping
9. Personal Service
10. Laundry Service
11. Materials Handling

The R-FVII is designed to be self-administering and has no time limit. It can be used with individuals or groups and the same form is used with males and females.

Normative data for the R-FVII were developed during the 1980-1981 school year, when the *Inventory* was administered to samples of educable mentally retarded (EMR) and learning disabled (LD) students in grades seven through twelve in public day schools, and samples of mentally retarded adults in sheltered workshops and vocational training centers. Public school norms are based on 2132 EMR and 2034 LD males, 2163 EMR and 1967 LD females from public school systems in thirty states. Ten separate norm categories are presented based on age, sex and classification (EMR or LD).

Reliabilities were determined through analysis of scores collected from cases in the standardization sample. Test-retest coefficients were mainly in the .70 and .80 range, with generally higher correlation coefficients for the LD subsamples.

Three dimensions of test validity were considered for the *Inventory*: content validity, concurrent validity and status or occupational validity. Content validity was built into the test when a complete search was made of jobs known to be appropriate and realistic for mentally retarded and learning disabled individuals. The resulting list of job

task items made up the clusters of the interest scale.

Concurrent validity was established with testing using the *Geist Picture Interest Inventory*, and an empirical validation study showed that occupational groups scored higher on their "own" scale than on scales outside of the incumbent work area (Becker, 1981). (See Appendix A.)

The Public School Version of the AAMD Adaptive Behavior Scale--Part One

This behavior rating scale is organized along developmental lines and is designed to evaluate an individual's skills and habits in nine behavior domains considered important in the development of personal independence in daily living. These are:

1. Independent Functioning
2. Physical Development
3. Economic Activity
4. Language Development
5. Number and Time Concepts
6. Vocational Activity
7. Self Direction
8. Responsibility
9. Socialization

The Scale was standardized on a group of 2600 school children in the state of California during the 1972-1973 school year. Norms are presented for regular, EMR, TMR and EH (Special class and learning disabled) classifications to age thirteen. Because the age group of the population used in this study exceeds that provided by the norm tables, raw scores were used for statistical analyses. The *Public School Version* differs from the *1974 Revision of the AAMD Adaptive*

Behavior Scale in that items which do not pertain to school have been eliminated. With the exception of "Independent Functioning", the items are identical in each domain between the two Scales. (See Appendix B.)

Teacher Questionnaire

This was an open-ended questionnaire designed to determine teachers' expectations of their students' future vocational prospects, role of parents in their program, goals of the school program and view of the school program. Seven questions in these areas were presented with comments requested. (See Appendix C.)

Parent Questionnaire

This questionnaire is parallel in form to the *Teacher Questionnaire*. It addresses parents' expectations of their child's future vocations, involvement in the school program and view of the school program. (See Appendix D.)

B. Description of the Sample

Students in the sample attended trainable mentally handicapped programs within the Edmonton Public and Edmonton Separate School systems. In the 1981-1982 school year, each system had one school offering programs to this age group of TMH students.

From an initial pool of fifty-two students, thirty parents agreed to participate and to allow their child to participate in the study. One child moved before completion

of the study, reducing the number of children assessed to twenty-nine. Of these remaining students, fifteen were males and fourteen were females. Students ranged in age from fourteen years, five months to nineteen years, one month, with an average age of sixteen years, two months. The measured I.Q.s of the sample ranged from thirty-six to fifty-four for sixteen students, with six students classed only as "in the moderate range", one classed as "in the educable range", and six with no established I.Q. On the basis of levels of functioning, these students were considered by the respective school board student placement teams to be suitable candidates for a trainable mentally handicapped program. Ten of these students had received work experience placements in the community.

Seven of the parent *Adaptive Behavior Scale* ratings were not returned. Of the twenty-two children for whom parent ratings were available, there were twelve males and ten females, ranging in age from fourteen years, five months to nineteen years, one month. Sixteen of these children were living with their natural parents; six were foster children whose length of placement in their current homes ranged from two to ten years. Seven of these students had been exposed to a work experience program.

All participating teachers were certified teachers with at least three years of experience in teaching trainable mentally handicapped students. There were six teachers in total; one from the Separate System and five from the Public

System.

C. Collection of Data

After initial approval of the research project from the respective school systems and approval from the schools, letters describing the study and requesting signed permission for participation were distributed to fifty-two parents by the schools. The thirty parents who granted consent were then contacted by telephone to inform them of the nature of the questionnaires which they would receive, of the procedure for returning the questionnaires and of the testing of their children. The *Parent Questionnaire* and the *AAMD Adaptive Behavior Scale* were mailed to the parents. Detailed instructions for completion were included and follow-up phone calls were made to ensure that the parents understood the instructions.

The *Reading Free Vocational Interest Inventory* was administered on a one-to-one basis in a quiet room in each school. It was stressed that this was not a test and that there were no right or wrong answers. The students were instructed to either tell the examiner or to point to the picture of the job they would like to do best in each row. The examiner marked the chosen item in each row, as well as recording every session on tape. Any questions the students had regarding the pictures were answered by the examiner.

The *AAMD Adaptive Behavior Scale* and the *Teacher Questionnaire* were distributed to the teachers. Written

instructions accompanied these, and the examiner met with the teachers to explain the directions and to answer the teachers' questions.

D. Assumptions

The following assumptions were considered to be relevant to the present investigation:

1. That in order for programming to be effective with TMH students, parents and teachers must agree on the student's level of functioning and areas needing remediation so that these skills may be developed both in school and at home.
2. That adequate validity and reliability for measuring adaptive behavior are provided by the *AAMD Adaptive Behavior Scale*.
3. That the respondents completed the *AAMD Adaptive Behavior Scale* to the best of their ability.
4. That the *Parent Questionnaire* and *Teacher Questionnaire* evoked honest, reliable responses.
5. That the sampling procedure was adequate to provide for valid results.
6. That the students' placements in the TMH program are reliable and valid placements.
7. That parents and teachers are aware of children's interests and can predict vocational areas which would interest the child.

IV. Analysis and Interpretation of Data

Chapter IV includes data analysis as well as interpretation of the data. Because much of the data was not amenable to statistical analysis, being in the form of open-ended questionnaire responses, this chapter format was chosen as most suitable.

A. Data Analysis

Purpose of Data Analysis

This study investigated the extent to which parent and teacher evaluations of trainable mentally handicapped secondary students' adaptive behaviors were comparable, the degree of parental involvement in the school, the desired role of these parents, parent and teacher views of the school program, and their expectations for the students' future vocational activities. The feasibility of using the *Reading Free Vocational Interest Inventory* with trainable mentally handicapped secondary students was also investigated.

Statistical Analysis

Are parent evaluations of trainable mentally handicapped secondary students' developmental level and skills, as measured by the *Adaptive Behavior Scale*, comparable to those of their teachers? Parent and teacher ratings for each child of the twenty-two children for whom complete data was available, were compared using t-tests for

correlated means (Ferguson, 1976). The nine domains rated by the parents and teachers were:

1. Independent Functioning
2. Physical Development
3. Economic Activity
4. Language Development
5. Numbers and Time
6. Vocational Activity
7. Self Direction
8. Responsibility
9. Socialization.

Table 1 reports the raw scores given the students by parents and teachers. As noted in Chapter III, raw scores were used for comparison because norms are not available for this age group in the manual. Table 2 reports t-ratios and the levels of significance of the differences in the ratings between the two groups. For the purposes of this study, the .05 level was required for significance.

To determine if parent and teacher ratings were comparable between schools, for boys compared to girls and for work-experience groups compared to non-work-experience groups, simple t-tests for independent means (Ferguson, 1976) were used. Table 3 reports t-ratios, degrees of freedom adjusted for unequal variance (Ferguson, 1967), and levels of significance for the school comparison. Table 4 provides this information for the boy/girl comparison and Table 5 for work-experience and non-work-experience

Table IV.1

Parent and Teacher Ratings on the Adaptive Behavior Scale
Raw Score

Stud.	Ind. Func.		Phys. Dev.		Econ. Act.		Lang. Dev.		No. s and Time		Voc. Act.		Self Dir.		Resp.		Soc.	
	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T
1	50	54	24	20	2	2	26	12	11	5	8	9	12	10	3	3	17	12
2	72	66	15	17	9	7	30	32	12	12	9	11	15	17	6	6	25	24
3	63	73	22	22	10	10	37	36	11	11	9	7	13	16	4	5	17	20
4	53	65	24	24	5	0	33	30	9	1	10	8	15	11	4	4	20	22
5	68	57	22	24	4	1	21	27	5	6	8	6	13	11	5	4	19	20
6	64	68	23	22	7	7	32	31	11	10	6	10	6	16	4	6	22	22
7	59	63	20	24	5	10	25	33	10	11	8	7	11	16	4	4	18	20
8	69	57	24	20	6	3	27	11	8	3	11	9	15	12	4	2	21	12
9	32	49	17	17	4	4	36	25	9	10	8	8	14	15	4	5	14	21
10	70	57	24	24	2	7	28	30	8	9	9	8	17	18	5	4	25	24
11	63	65	21	13	4	11	33	35	9	12	9	10	15	17	5	6	22	18
12	67	69	24	23	9	10	38	36	12	12	6	11	13	18	4	5	17	27
13	74	67	12	23	5	8	19	28	9	7	11	11	14	18	5	6	21	25
14	60	70	24	21	4	6	21	26	5	6	8	6	5	13	2	2	15	17
15	61	59	23	23	5	3	27	17	5	10	5	8	12	11	3	3	14	14
16	59	64	23	23	5	5	23	20	7	6	6	10	8	13	4	4	18	17
17	75	67	22	23	13	8	37	30	12	9	10	8	17	11	5	4	23	20
18	68	68	24	24	3	6	26	29	6	8	9	10	14	18	4	5	23	20
19	65	67	24	23	8	8	29	31	9	10	9	10	18	13	4	4	19	18
20	72	67	21	24	10	4	30	22	11	7	10	10	16	12	5	3	21	16
21	68	70	22	24	9	9	35	36	10	11	9	10	18	18	4	4	23	21
22	64	74	24	24	10	13	24	31	12	10	6	10	11	18	4	3	18	20
23		65		24		3	34	34		9		11		20		5	25	25
24		68		24		3	35	35		5		10		18		4	24	24
25		73		24		8	32	32		7		9		18		6	26	26
26		66		23		4	27	27		7		10		14		5	22	22
27		75		23		8	29	29		7		11		19		6	25	25
28		67		24		7	27	27		9		10		19		4	21	21
29		60		22		10	29	29		10		10		17		6	22	22
Tot. Pos.	86		24		17		39		12		11		20		6		26	

Table IV.2

Statistical Comparison of Parent and Teacher
Ratings of Students' Skills on the Adaptive Behavior Scale

D O M A I N	PARENT MEAN RATING	TEACHER MEAN RATING	t-RATIO	LEVEL OF SIGNIFICANCE
Independent Functioning	63.45	64.36	.519	.6090
Physical Development	21.77	21.86	.119	.9061
Economic Activity	6.27	6.45	.251	.8046
Language Development	28.95	27.63	.873	.3924
Numbers and Time	9.14	8.45	1.050	.3056
Vocational Activity	8.36	8.95	1.215	.2379
Self Direction	13.17	14.63	1.449	.1621
Responsibility	4.09	4.18	.418	.6800
Socialization	19.77	19.22	.638	.5302

Note: df = 21 for all comparisons
N = 22

Table IV.3
Statistical Comparison of Parent Ratings and
Teacher Ratings of Students from Different Schools

Domain	School 1 Mean Rating	t-ratio	School 2 Mean Rating	df	Level of sig.
<u>Parent Ratings</u>					
	N=15		N=7		
Independent Functioning	61.67	1.6627	67.29	21.97	.111
Physical Development	21.27	1.4840	322.86	19.80	.154
Economic Activity	5.40	1.9260	8.14	9.91	.083
Language Development	28.87	0.1089	29.14	15.13	.915
Numbers and Time	8.93	0.5854	9.57	13.71	.568
Vocational Activity	8.33	0.1211	8.42	13.52	.905
Self Direction	12.67	1.1365	11.66	.279	
Responsibility	4.12	.2922	4.00	13.39	.775
Socialization	19.13	1.3697	21.14	15.96	.190
<u>Teacher Ratings</u>					
	N=20		N=9		
Independent Functioning	64.30	1.4106	67.11	27.98	.169
Physical Development	21.70	2.3780	23.44	23.65	*.026
Economic Activity	6.05	1.4943	7.78	19.88	.151
Language Development	28.30	0.0145	28.33	25.32	.989
Numbers and Time	8.00	1.0101	8.89	28.62	.321
Vocational Activity	9.00	1.7774	9.78	28.42	.086
Self Direction	15.40	0.0356	15.44	16.95	.972
Responsibility	4.55	1.0277	4.11	24.12	.314
Socialization	20.75	1.3075	19.22	28.95	.201

*Statistically significant at .05 level

Table IV.4

Statistical Comparison of Parent Ratings and
Teacher Ratings of Student Skills Between Sexes

Domain	Mean Rating (Boys)	t-ratio	Mean Rating (Girls)	df	Level of sig.
<u>Parent Ratings</u>	N=12		N=10		
Independent Functioning	63.50	.0257	63.40	16.76	.980
Physical Development	21.25	.8923	22.40	14.52	.387
Economic Activity	6.08	.3290	6.50	21.57	.745
Language Development	27.83	1.0542	30.30	21.39	.304
Numbers and Time	9.00	.3043	9.30	19.76	.764
Vocational Activity	8.25	.3449	8.50	21.70	.730
Self Direction	13.17	.1491	13.40	18.77	.883
Responsibility	4.0	.5094	4.20	14.28	.618
Socialization	19.33	.6792	20.30	18.19	.506
<u>Teacher Ratings</u>	N=15		N=14		
Independent Functioning	63.13	1.9887	67.37	19.24	.061
Physical Development	21.73	1.0418	22.78	27.56	.307
Economic Activity	6.27	.6389	7.00	27.72	.528
Language Development	26.00	2.1032	30.79	26.56	*,045
Numbers and Time	8.20	.1510	8.36	27.79	.881
Vocational Activity	9.07	.6589	9.43	27.03	.516
Self Direction	14.80	1.1364	16.07	28.79	.265
Responsibility	4.27	.6805	4.57	25.76	.502
Socialization	19.87	.6127	20.71	26.12	.545

*Statistically significant at .05 level

Table IV.5
Statistical Comparison of Parent Ratings and
Teacher Ratings of Work-Experience and Non-Work-Experience Students

Domain	W-Exp. Mean Rating	t-ratio	N-W-Exp. Mean Rating	df	Level of sig.
<u>Parent Ratings</u>					
	N=7		N=15		
Independent Functioning	61.28	.8004	64.47	17.50	.434
Physical Development	21.43	.3427	21.93	14.36	.737
Economic Activity	6.00	.2983	6.40	15.01	.770
Language Development	29.14	.1076	28.87	14.66	.916
Numbers and Time	9.86	.9834	8.80	13.67	.343
Vocational Activity	8.29	.1684	8.40	19.69	.868
Self Direction	12.14	1.1069	13.80	16.05	.285
Responsibility	4.29	.6455	4.00	14.22	.529
Socialization	19.71	.0581	19.80	17.43	.954
<u>Teacher Ratings</u>					
	N=10	N=19			
Independent Functioning	65.20	.0174	65.16	20.94	.987
Physical Development	22.50	.3926	22.10	24.38	.698
Economic Activity	5.67	1.0473	7.05	14.44	.312
Language Development	30.20	1.1010	27.32	18.70	.285
Numbers and Time	7.70	8.58	14.09	.485	
Vocational Activity	8.80	1.0698	9.47	15.56	.301
Self Direction	15.30	.1362	15.47	17.38	.893
Responsibility	4.70	.9792	4.26	24.03	.337
Socialization	21.50	1.2485	19.63	18.11	.228

*Statistically significant at .05 level

students.

Questionnaire and Inventory Analysis

Because of the open-ended format of the *Parent* and *Teacher Questionnaires*, the data were described in terms of response categories and frequencies. The *Reading Free Vocational Interest Inventory* results were also described in this manner.

B. Interpretation of Data

Parent and Teacher Ratings of Students' Adaptive Behaviors

There were no statistically significant differences between parent and teacher ratings for each student's skills on the *Adaptive Behavior Scale*. Thus, it appears that parent and teacher are rating each child consistently on the *Adaptive Behavior Scale* items.

Between schools, there was a significant difference in the teacher ratings of Physical Development. This might be attributed to a varying interpretation of the statements by the teachers, or the possibility that one school had more students whose speech, vision or hearing were impaired. The parent ratings of Economic Activity and the teacher ratings of Vocational Activity approached statistical significance between schools. This may be related to the fact of one school having a work experience program in which these

skills are stressed in the daily program to prepare for possible placement.

Sex differences were significant in teacher ratings of Language Development. Perhaps this is because adolescent girls are often more verbal than adolescent boys. Teacher ratings of Independent Functioning approached significance between boys and girls. It may be that girls in both programs receive more training in home economic classes and at home so they are better able to care for their clothing, groom themselves, and are more concerned about their appearance.

A caution must be added in attempting to interpret the few obtained statistically significant t-ratios, however, because, given the large number of statistical comparisons made, it is possible that a small number may have been significant by chance.

No significant differences were present between ratings of work-experience students and non-work-experience students. It appears that work experience placement does not have an effect on skill development. However, these findings may be misleading because some parents refuse to allow their children to be placed in a work setting, although the school feels the student would benefit. It is not known whether these students would show more advanced skill development after a work-experience placement. Other possible explanations for the lack of differences between these two groups may be that the *Adaptive Behavior Scale* was not a

suitable instrument to detect such differences, or that the work-experience program placements are not extensive enough in the time spent in the work situation to promote advanced skill development.

Parent Involvement in the School Program

Of the twenty-two parents who completed questionnaires, sixteen indicated that they were not presently involved in the school program. The six parents who indicated involvement cited communication with teachers, reinforcement of the school program and membership in parent committees and the *Gateway Association for the Mentally Retarded* as methods of involvement. Of the six teachers surveyed, all indicated some parental involvement in their programs (See Table . 6) .

Desired Role of the Parents

When asked what the parents' role in the school program should be, six parents gave no response. The sixteen parents who did respond focused on a need for closer communication with the school, reinforcement of the school program at home, parent input into the programs, and consultation in placement and programs. Teachers identified these same roles, adding parental expression of goals for their child and parent encouragement and training of independence (See Table . 7). While parents and teachers appeared to disagree on the present level of parental involvement in the school program, they noted similar functions when asked what role

Table IV.6

Present Parent Involvement in the School Program:
Responses by Parents and Teachers

	No. of Parents	No. of Teachers
No involvement	16	0
Communicate with teachers frequently	2	4
Active in Gateway Association	4	1
Knowledge and reinforcement of school program at home	3	4
Parent committees	2	0
Concerned	0	2

Note: Columns total more than total number of respondents because respondents could give multiple responses.

Table IV.7

Desired Role of Parents in the School Program:
Responses by Parents and Teachers

	No. of Parents	No. of Teachers
Reinforcement of school program	10	2
Parent input (advisory)	5	1
Consultation in placement and programs	5	4
Assist in programs (aides)	1	1
Closer communication with the school	6	3
Encourage and train independence	0	4
Express goals for their child	0	4
No response	6	0

Note: Columns total more than total number of respondents because respondents could give multiple responses.

the parents should take. This indicates that the two groups agree on the potential role of parents and this correspondence could lead to the fulfillment of these roles.

Parent and Teacher Views of the School Program

The teachers were asked to identify the goals, for the students, of their school programs. All of the teachers identified "independence" as a goal. The specific goals as listed by the six teachers were:

1. To be able to work and complete a single task assigned re: vocational skills. To function in society--to learn social skills to be accepted in work and social areas. To learn independence.
2. To develop skills that will enable the student to function as independently as possible as an adult in the community. The level of independence will differ for each student.
3. To maximize independence and normalization through using the "cascade model" of least restrictive environment.
4. To work independently on task for a reasonable length of time. To be able to work and co-operate with other people. To live in society as independently as able to.
5. To achieve the maximum level of independence possible in order to function as best they can in the community.
6. To be able to live independently or semi-independently away from home. To be able to manage their own money. To be able to work either in an unsheltered or sheltered workshop. To be able to travel independently to and from work as well as other destinations in the community. To be able to communicate effectively and use proper language with other people. To be able to independently groom themselves. To be able to use leisure time effectively when alone and while with others.

Both teachers and parents were questioned as to what they would like to see included in the school program. Seven

parents and one teacher suggested no additions to the present program. Of those who offered responses, parents emphasized job skill training, work experience, services such as speech and physiotherapy, sex education, and more emphasis on life skills, basic academic skills, communication skills, and home economics. Teachers identified work experience, life skills, speech and physiotherapy, sex education, and written goals for the program as areas needing expansion (See Table IV.8) . The two groups agreed on many potential components, which has implications for programming in that the home and school may work towards common goals.

Parents were specifically asked if job training should be part of the school program. Eighteen of the parents agreed that job training should be included in the TMH secondary students' programs. Of the four parents who did not agree, three qualified their answers by indicating that "job readiness but not specific vocational training" should be included, developing skills such as "punctuality and following instructions". One parent noted that job training should be a separate program after the age of eighteen.

Parents were encouraged to make comments relevant to the school program. With regard to the curriculum, four parents each commented that there was too much free time during the school day, and too much time was "wasted" at school. Three parents noted that there were too many sports outings such as swimming and bowling, that the curriculum

Table IV.8

Responses of Parents and Teachers Indicating Potential
Components of the School Program

	No. of Parents	No. of Teachers
More Emphasis of Life Skills	2	2
More emphasis of Basic Academic Skills	2	0
Speech Therapy	4	2
Communication Skills	2	0
Typing	3	0
More Home Economic Skills	2	0
Sex Education	2	1
Physiotherapy	2	2
Job Skills Training	8	0
Written Goals for Program	0	1
Expand Work Experience	3a	2b
Work Experience	5c	1d
No Response	7	1

a) of the fifteen parents whose children are offered a work experience program
b) of five teachers whose program offers work experience
c) of seven parents whose children are not offered a work experience program
d) of one teacher whose program does not offer work experience

was too similar from year to year with their children repeating the same skills, and that their children were not challenged and had become bored with the program.

Four parents felt there was a serious lack of communication between the home and the school and there was little continuity in programs from one school to the next. Three parents were concerned that assessment and placement decisions were made without parental consultation. One parent noted that there was a lack of direction for teachers, and two parents expressed concern about teacher burnout and suggested that teachers spend a maximum of three years at a time in the TMH program.

Other components included the suggestion of a longer school day for TMH secondary students (their day ends at 2:30 p.m.), continuation of the school program to age twenty-two with the last years devoted to work training, the need for a better bussing system, and concern that because of the wide range of abilities of the students present in TMH classes, the individual student's needs are not being met.

One parent considered the work experience program to be "exploitation" and "cheap labour", while three parents noted that there should be fair payment to work experience students.

Parent and Teacher Expectations

For the twenty two students whose parents returned questionnaires, sixteen parents felt their child would have a job in the future and six were undecided. The teachers felt that fifteen students would be employed and were undecided regarding seven students in this group. Teachers and parents agreed on their expectations in fifteen cases. In four instances, teachers were undecided as to the employability of the students while these parents felt the students would have a job in the future. There were three cases in which parents were undecided as to the job future of their child, but their teachers felt the student would be employed at sometime.

When questioned as to what would be an appropriate job for each student, eleven of the parents' suggestions were comparable to the teachers' suggestions, according to Becker's (1981) job categories (see Table IV.9) .

The parents and teachers of the individual children appeared to have similar expectations for the child. These findings are likely a result of the fact that the parent and teacher agree on the child's vocational future. When both parent and teacher expect that a child will be employable, they can aim at developing job-related skills such as punctuality, use of public transportation and following directions both in and out of school.

Table IV.9

Appropriate Jobs for Specific Students as Suggested by
Their Parents and Teachers

STUD.	JOB NAMED BY TEACHER	JOB NAMED BY PARENT
2	Stock moving	undecided
3	Janitorial	Library
4	Janitorial	Janitorial +
5	Manual	Manual +
6	Day care	Undecided
7	Restaurant	Unavailable
8	Sorting goods,	Sorting goods +
	Restaurant	
9	Well supervised	Not available
10	Janitorial,	Day care +
	Day care	
11	Food service,	Library
	cleaning	
12	Undecided	Child care
13	Cleaning	Not available
14	Manual	Manual +
15	Repetitive,	Repetitive,
	supervised,	supervised +
16	plants, animals	plants, animals +
17	No pressure,	Physical
	physical	repetitive +
18	Janitorial	Animals
19	Child care,	Not Available
	food service	
20	Janitorial,	Not Available
	food service	
21	None as of yet	None known now +
22	Grocery bagger	Not available
23	Housekeeping	Cooking, hair dressing
24	Stockroom	Undecided
25	Laundry,	Undecided
	housekeeping	
26	Housekeeping,	Undecided
	library	
27	Cleaning,	Cashier
	kitchen work	
28	Gas station	Not available
29	Bakery or library	Grocery
30	Warehouse	Carpenter +

+ Comparable to job named by the teacher

Use of the Reading Free Vocational Interest Inventory

Parent and teacher predictions of jobs that would interest the students were coded into Becker's (1981) job categories. Specific ratings were not available for all students as some parents and teachers were "undecided" or were not specific when asked about a particular student's vocational interest. The students' "high interest areas" obtained from the *Reading Free Vocational Interest Inventory* (RFVII) were compared with categories of interest named by parents and teachers (see Table IV.10) .

Specific teacher ratings were available for twenty-five students. Of these, six agreed with the findings of the RFVII. The RFVII assessment agreed with the parent assessment in three of sixteen cases. Specific ratings from both parent and teacher were available for thirteen students and parent and teacher assessments of vocational interest were comparable in nine of these instances. The RFVII identified "high interest" areas which agreed with both the parent and teacher assessments for only two students.

For twelve students, the RFVII identified a category as "low interest" although it had been named as an area of vocational interest by the parent and/or teacher.

Several problems were encountered when administering the RFVII to this group of students. Four students appeared to guess as they did not look at all of the pictures before making their selection. Two of these students selected randomly and two selected the first picture in each triad.

Table IV.10

Results of the Reading Free Vocational Interest Inventory
Parent and Teacher Ratings of Student's Vocational Interests

Student	RFVII Results	Teacher Ratings	Parent Ratings
Students with Work Experience			
1	HIGH INTEREST FS Ly	LOW INTEREST BTr MHg	Undecided
+6	FS Ly	Hort	Not avail.
7	AnCr Hort	PCr	MHg BTr
+8	Auto	C1 MHg	MHg FS
+9	Hort Ly	PSv Hsk	Not avail.
+11	AnCr Hort	PSv FS C1 MHg	PSv
+14	AnCr Hort	BTr C1	FS Hsk C1
15	PCr	MHg	AnCr Hort
16	PCr	MHg	Hort AnCr
18	AnCr Hort	PSv C1 Ly	C1
		PSv	Not avail
Students with No Work Experience			
+2	FS Ly	BTr MHg	Undecided
+3	FS	Hsk BTr MHg	Undecided
+4	None	MHg Auto	MHg
+5	Auto BTr	PSv Ly	Undecided
+10	FS AnCr	Hsk MHg	FS Hsk C1
+12	Hsk Ly	BTr FS MHg	Not avail.
+13	None	PCr	BTr Auto
17	FS	Auto BTr MHg	AnCr
+19	AnCr	C1 MHg	Not avail.
+20	AnCr	BTr Auto MHg	BTr FS
21	Hort	C1 PCr Ly	Undec.
22	Hsk AnCr	C1 PSv Ly	PSv
23	***	FS Hsk PCr	Not avail.
+24	PCr Hort	FS C1 BTr MHg	FS Hsk
25	Auto PCr	PSv Hsk Hort	PSv
26	None	None	Undec.
27	Hort	C1 FS PSv PCr	PSv
28	AnCr Hsk	C1	Not avail.
29	C1 FS	AnCr Hort Hsk	FS PSv
		MHg Auto	Undec.

+ - Student considered answers carefully, ++ - Student appeared to guess

***Unable to complete task

Abbreviations

Auto	Automotive	BTr	Building Trades	PSv	Personal Service
C1	Clerical	AnCr	Animal Care	MHg	Materials Handling
FS	Food Service	PCr	Patient Care	Ly	Laundry Handling
Hort	Horticulture	Hsk	Housekeeping		

One student was unable to complete the task, although he appeared to understand what he was to do. He insisted that he could not choose one picture because he said "I don't like them" or "I don't want them". After two unsuccessful attempts, testing was discontinued.

Several students had queries regarding the occupations represented in the pictures. Questions were asked such as "What are they doing?" and "What's this?". Other difficulties included the students' distractibility, difficulty for some students in making a choice between three unpreferred activities, the student skipping rows or not wanting to complete the test, and students responding to something specific in the picture rather than the occupation represented (see transcription in Appendix E and F for examples of these).

Due to the above difficulties, and the lack of compatibility of the obtained results with parent and teacher ratings of interest, test results for the RFVII with this population are questionable.

V. Summary and Conclusions

A. Summary of the Study

Research suggests that co-operation between the home and school and a mutual appreciation by parents and teachers of the role each has to play in the education of the child increases opportunities for development (Voelker, 1967). Parent's attitudes and future aspirations for their child have also been found to be important for the child's attainment of goals (Brolin, 1976). In order for the career education concept to be successfully implemented with trainable mentally handicapped students, parents and teachers must be in agreement as to the student's present level of functioning so that programming efforts are consistent between the home and school. The study included a survey of both parents and teachers, investigating the following questions:

1. Were parent evaluations of trainable mentally handicapped secondary students' developmental level and skills comparable to ratings by their teachers, and were ratings different between schools, boys and girls, and work-experience and non-work-experience students?
2. To what degree were parents of trainable mentally handicapped students involved in the school program, what was their desired role, what future expectations did they have for their children, and what concerns did they have regarding the educational program?
3. Could the *Reading Free Vocational Interest Inventory* be successfully administered to trainable mentally handicapped students with valid results?

The first question was investigated by having parents and teachers complete the *Adaptive Behavior Scale* for each child. Parental involvement, expectations and concerns were gained from an open-ended questionnaire. The *Reading Free Vocational Interest Inventory* was administered to twenty-nine students and results of twenty-two students were compared with parent and teacher ratings of the student's vocational interest, and for an additional seven, with only teacher ratings.

No statistically significant differences were found between parent and teacher ratings of the student's skills. There was a significant difference in the teacher ratings of Physical Development between schools, and sex differences were significant in teacher ratings of Language Development. No significant differences were present between ratings of work-experience and non-work-experience students.

Of twenty-two parent respondents, only six indicated any form of present involvement in the school program, while teachers all indicated experiencing some form of parent involvement. Teachers and parents agreed on the roles parents should play in the school program and were also in agreement on many additions to the school curriculum. They differed in that some parents listed basic academic skills, typing, more home economic skills, and job skill training as components that could be added to the program, whereas teachers did not mention these.

Parents' expectations of their children's future employability were generally optimistic with sixteen of twenty-two parents expecting their child to have a job in the future.

Parents' concerns with regard to the school program focused on a concern that too much unproductive time existed during the school day, a repetitive curriculum, a lack of communication between the home and school, and a lack of consultation with parents regarding educational assessment and placement.

There were several difficulties encountered in administering the *Reading Free Vocational Interest Inventory* to these students and the results were compatible with parent or teacher ratings of interest in less than one third of the cases.

Limitations of the Study

Because of the small sample size and limited number of programs available for survey, generalizations and conclusions based on the data must be viewed with caution.

Difficulties were encountered with the mailed questionnaire format of research. Seven parents who initially consented to participate in the study did not return the questionnaires even after repeated telephone contact and offers of assistance. The parents who did take the time to participate may not have provided a representative sample of parents' views. For this reason, an

interview method for data collection is recommended for future studies of this kind.

The *Public School Version of the Adaptive Behavior Scale* does not provide norms in the manual for this age group, and therefore it was necessary to make comparisons using raw scores. Although this does not affect the research comparisons made for individual scales, it limits the practical application of the instrument in that comparisons cannot be made between subtests for individual students. Therefore, individual strengths and weaknesses are not determinable from this version.

An additional limitation may be that some of the data gathered was subjective, and thus not amenable to statistical analysis.

B. Conclusions

No differences were found in teacher and parent ratings of the students' developmental level and skills. These findings indicate that parents' perceptions of their children's level of functioning are consistent with teachers' ratings of school functioning, and provides encouraging implications for programming. If parents and teachers are in agreement as to a child's level of functioning, the next step should be collaboration in identifying skills which need development. When parents and teachers agree on which skills a child needs to develop, a program can be implemented both at home and in school which

works towards common objectives to increase a child's developmental opportunities. Consistency of programming, reinforcement in the home of what is taught at school, and parent and teacher agreement on necessary skill development can only enhance a child's education.

In contrast to the findings of the present study, Mealor and Richmond (1980), in a similar investigation, found significant differences between the ratings of parents and teachers of Independent Functioning, Physical Development, Economic Activity and Vocational Activity of the *Adaptive Behavior Scale*. However, the children involved in their study were of a younger age group (between seven and thirteen years of age). The skills tapped by Independent Functioning, Physical Development, Economic Activity and Vocational Activity are more in evidence in the home than at school (Mealor and Richmond, 1980) and so perhaps parents have a greater information base from which to rate performance in these areas at the earlier age. By secondary school age, many of the skills tapped by the above subtests of the *Adaptive Behavior Scale* may be more evident at school in classes such as home economics, shop, and life skill training. Also, at this age there may be increased teacher familiarity with a child which would lead to a more accurate rating of performance.

When compared to the responses of parents regarding what role they should fulfill, the number of parents who indicated they were presently involved was low. From

telephone contact, it was observed that being the parent of a retarded child is a difficult task for many parents.

Several parents expressed frustration and discouragement in regard to their children's educational programs. Program cutbacks, lack of funds, bureaucracy, repeated assessments and lack of information caused many of the parents to tire of fighting what to them appeared to be a losing battle.

The results indicated a great need for better communication between the school and the home. Many parents were concerned about their child's educational program, as was evidenced by their often lengthy discussions with the researcher, and they are willing to support the school's efforts. Ten of the surveyed parents indicated reinforcement of the school program as a role the parents should fulfill. They stated that they would support the program if they had more information about it.

The surveyed parents and teachers agreed on many of the major points regarding what the parents' role should be and what modifications could be made to the present program. However, both groups appear to be unaware that they share mutual concerns. With improved communication, the home and school could work together towards common goals, which would improve their children's educational programs. United, parents and teachers could also bring more pressure on administration where needed to increase the possibility of change.

Perhaps the impetus for action in developing this communication should be placed upon the school. Some parents may not know how to go about getting involved, others may fear being labelled a "trouble maker", and still others have given up. Closer contact with these parents to inform them of their child's programming needs, reasons for placement, and other issues would facilitate program development and implementation.

Increased parent-teacher interview opportunities, telephone contact, and letters of information home are some methods that may initially aid communication. Once parents are made to feel that they are important in their child's education, that their support is welcomed, that they share common concerns with teachers, and that they are knowledgeable, they may take on a supportive role.

It is up to parents to inform teachers of their concerns and to express their goals for their children. Teachers can be more effective if they are made aware of these and if they have support from the home. A mutual understanding between parents and teachers can only be achieved through increased communication efforts from both groups.

Parents' expectations for their children's future employability generally agreed with those of their teachers. However, in many cases, parents or teachers were undecided as to the type of job that would be suitable for these students. Research is needed to investigate a variety of

jobs that may be made available to these students. Locally, studies could be conducted to discover which employers would hire these students, what skills employers expect of these students for employability, and how the school can increase future employability.

The results of the testing with the *Reading Free Vocational Interest Inventory* indicated that this inventory is not suited to TMH secondary students. Although Becker *et al* (1981) concluded that the inventory predicts successful job placements of TMH adults, the results of this study agreed with those of Drugo and Cohen (1977) who found the instrument "practically useless" with TMH high school students and did not recommend its further use.

These findings point out the need for research to develop vocational assessment techniques that can be used with TMH students. There is presently no reliable and valid instrument available to assess TMH students' vocational interest or aptitude. Such instruments would aid educators in vocational preparation of these students.

In summary, the results of the present study have indicated a need for increased communication between educators of TMH students and the home. There is agreement between the two groups on many issues and they share many common concerns and goals. While there would still be points of disagreement, better communication would improve educational opportunities for these students and would allow parents and teachers to unite as an educational force.

Since the goals of career education for the handicapped include education that is meaningful to the individual's career aspiration and realistic to his or her fullest potential (Brolin and Kokaska, 1979), the mutual views of parents and teachers regarding the child's skills and potential can serve as a basis for career education program development. The career education structure could then be altered to fit the social-emotional and cognitive levels of the students. In this way, trainable mentally handicapped students may be afforded the opportunity to develop the skills necessary for attaining their "highest levels of economic, personal and social fulfillment" (Brolin *et al*, 1977).

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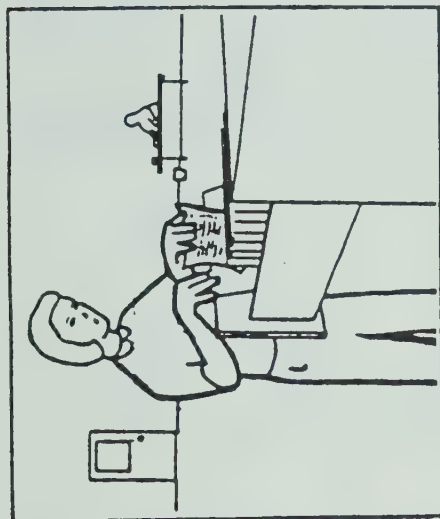
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APPENDIX A

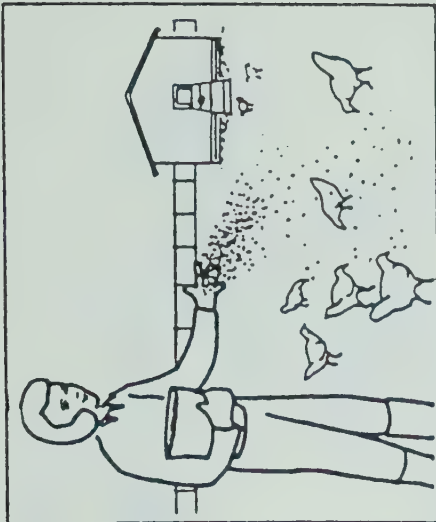
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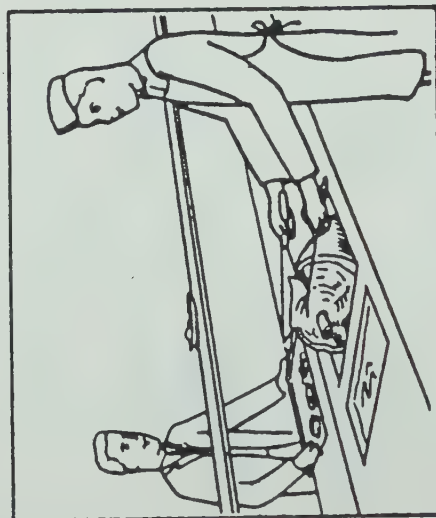
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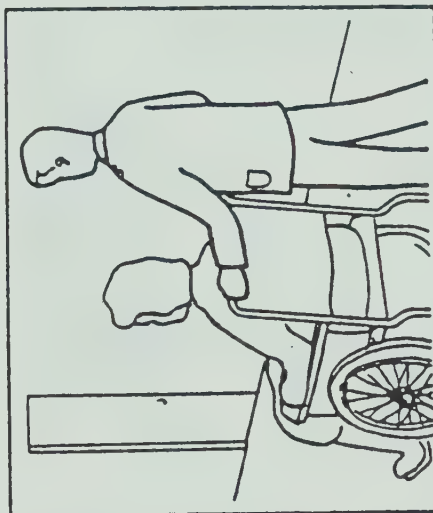
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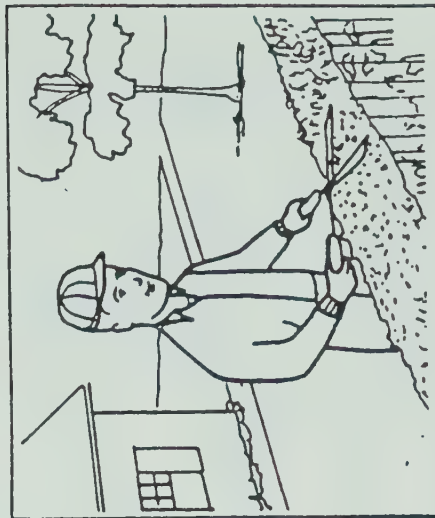
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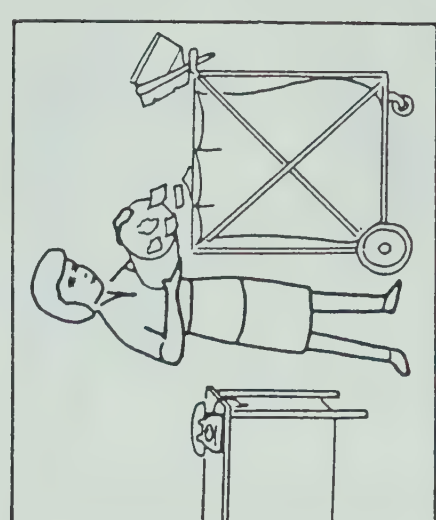
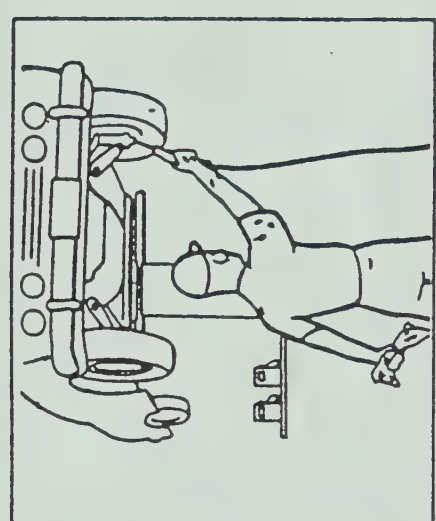
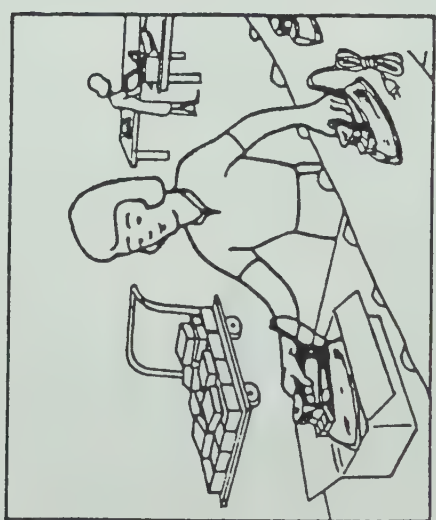
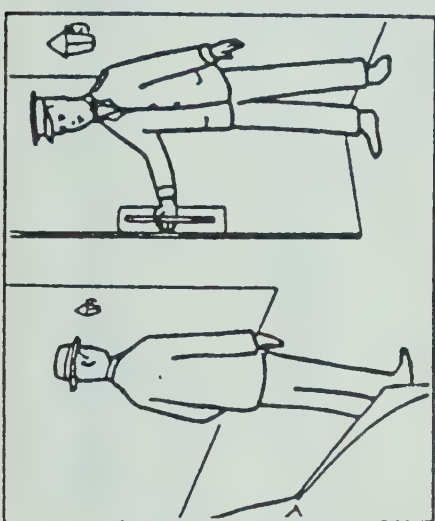
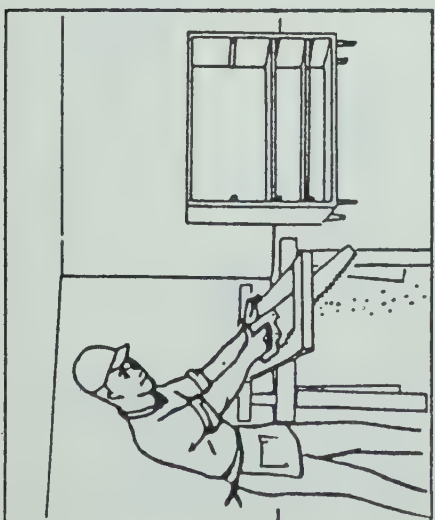


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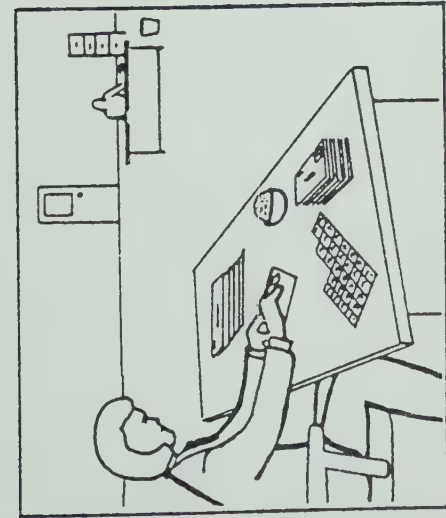
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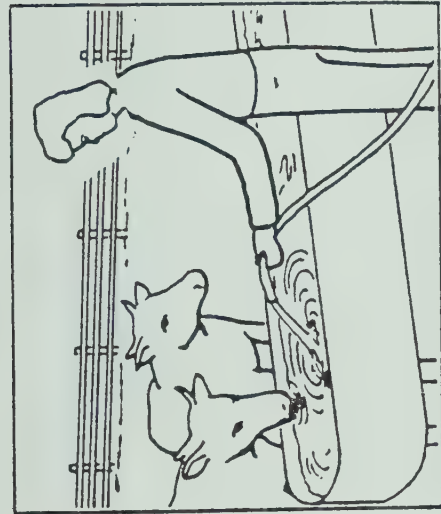


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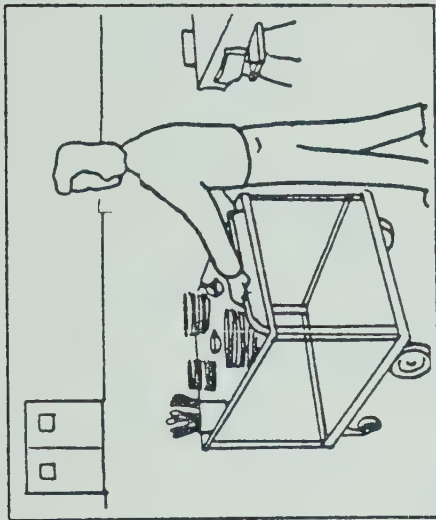
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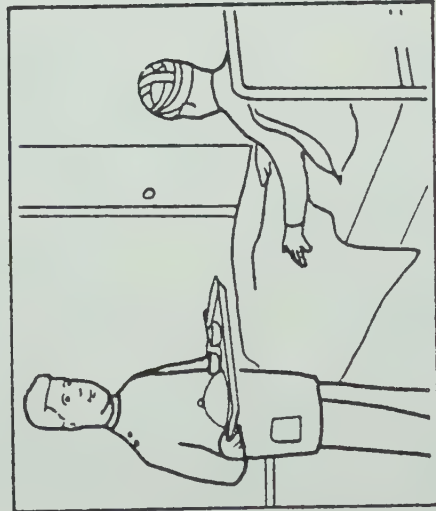
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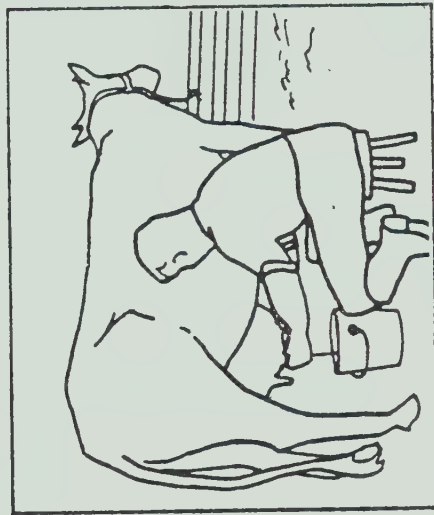
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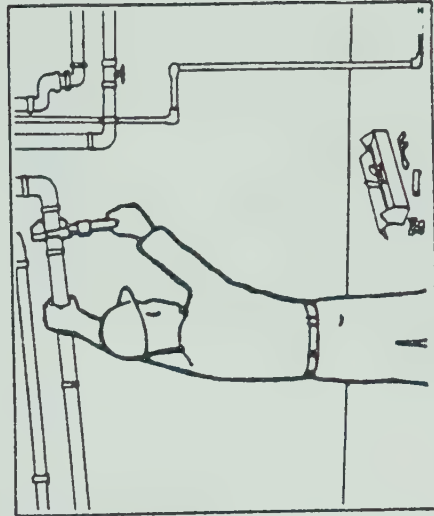
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APPENDIX B
The Adaptive Behavior Scale

Appendix B

The Adaptive Behavior Scale

Instructions

This Scale consists of a number of statements which describe some of the ways your child may act in different situations. There are two kinds of questions. The first requires that you select only *ONE* of the several possible responses. For example:

Eating in Public (Circle only *One*:

Orders complete meals in restaurants	3
Orders simple meals like hamburgers or hot dogs	2
Orders soft drinks at soda fountain or canteen	1
Does not order at public eating places	0

Circle the one statement which best describes the *MOST DIFFICULT TASK* your child can usually manage. In this example, the individual can order simple meals like hamburgers or hot dogs (2), but cannot order a complete dinner (3).

The second type of question asks you to check *ALL* statements which apply to your child. For example:

Table Manners:

(Check *ALL* statements which apply)

Swallows food without chewing	<input type="checkbox"/>
Chews food with mouth open	<input checked="" type="checkbox"/>
Drops food on table or floor	<input type="checkbox"/>
Uses napkin incorrectly or not at all	<input checked="" type="checkbox"/>
Talks with mouth full	<input type="checkbox"/>
Takes food off others' plates	<input type="checkbox"/>
Eats too fast or too slow	<input type="checkbox"/>
Plays in food with fingers	<input type="checkbox"/>
None of the above	<input type="checkbox"/>

In this example, the second and fourth items are checked to indicate that the person "chews food with mouth open" and "uses napkin incorrectly". If the person showed none of these behaviours, "None of the above" would be checked.

Some items may deal with behaviours that are not possible for your child to perform because the opportunity does not exist, (e.g. if you live in the country, it may not

be possible to ride in a taxi). In these cases, please still complete your rating. Give the child credit for the item you feel *ABSOLUTELY CERTAIN* he or she can and would perform if given the opportunity.

In items which specify "with help" or "with assistance" for completion of a task, these mean with *DIRECT PHYSICAL ASSISTANCE*. Give the child credit for an item even if he or she needs verbal prompting or reminding to complete the task unless the item definitely states "without prompting" or "without reminder".

Please remember, the information you give is completely confidential and will only be used by Miss Barry for purposes of her thesis study. Even if some items may not seem to be relevant to your child, please answer *ALL* items. Thank you again for your co-operation.

PHYSICAL DEVELOPMENT

A. Sensory Development

(Observable functioning ability)

1. Vision (With glasses, if used) (Circle only ONE)

No difficulty in seeing	3
Some difficulty in seeing	2
Great difficulty in seeing	1
No vision at all	0

2. Hearing (With hearing aid, if used) (Circle only ONE)

No difficulty in hearing	3
Some difficulty in hearing	2
Great difficulty in hearing	1
No hearing at all	0

B. Motor Development

3. Body Balance (Circle only ONE)

Stands on "tiptoe" for ten seconds if asked	5
Stands on one foot for two seconds if asked	4
Stands without support	3
Stands with support	2
Sits without support	1
Can do none of the above	0

4. Walking and Running (Check ALL statements which apply)

Walks alone	_____
Walks up and down stairs alone	_____
Walks down stairs by alternating feet	_____
Runs without falling often	_____
Hops, skips or jumps	_____
None of the above	_____

5. Control of Hands (Check ALL statements which apply)

Catches a ball	_____
Throws a ball overhand	_____
Lifts cup or glass	_____
Grasps with thumb and finger	_____
None of the above	_____

6. Limb Function (Check ALL statements which apply)

Has effective use of right arm	_____
Has effective use of left arm	_____
Has effective use of right leg	_____
Has effective use of left leg	_____
None of the above	_____

ECONOMIC ACTIVITY

A. Money Handling and Budgeting

7. Money Handling (Circle only ONE)

Uses banking facilities independently	4
Makes change correctly but does not use banking facilities	3
Adds coins of various denominations, up to one dollar	2
Uses money, but does not make change correctly	1
Does not use money	0

8. Budgeting (Check ALL statements which apply)

Saves money or tokens for a particular purpose	_____
Budgets fares, meals, etc	_____
Spends money with some planning	_____
Controls own major expenditures	_____
None of the above	_____

B. Shopping Skills

9. Errands (Circle only ONE)

Goes to several shops and specifies different items	4
Goes to one shop and specifies one item	3
Goes on errands for simple purchasing without a note	2
Goes on errands for simple purchasing with a note	1
Cannot be sent on errands	0

10. Purchasing (Circle only ONE)

Buys all own clothing	5
Buys own clothing accessories	4
Makes minor purchases without help (candy, soft drinks, etc.)	3
Does shopping with slight supervision	2
Does shopping with close supervision	1
Does no shopping	0

LANGUAGE DEVELOPMENT

A. Expression

11. Writing (Circle only ONE)

Writes sensible and understandable letters	5
Writes short notes and memos	4
Writes or prints forty words	3
Writes or prints ten words	2
Writes or prints own name	1
Cannot write or print any words	0

12. Verbal Expression
(Check ALL statements which apply)

- Nods head or smiles to express happiness _____
- Indicates hunger _____
- Indicates wants by pointing or vocal noises _____
- Chuckles or laughs when happy _____
- Expresses pleasure or anger by vocal noises _____
- Is able to talk _____
- None of the above _____

13. Articulation Check ALL statements which apply--if no speech, check "None"

- Speech is low, weak, whispered or difficult to hear _____
- Speech is slowed, deliberate, or labored _____
- Speech is hurried, accelerated, or pushed _____
- Speaks with blocking, halting, or other irregular interruptions _____
- None of the above _____

14. Sentences (Circle only ONE)

- Sometimes uses complex sentences containing "because," "but," etc. 3
- Asks questions using words such as "why," "how," "what," etc. 2
- Speaks in simple sentences 1
- Speaks in primitive phrases only, or is non-verbal 0

15. Word Usage (Circle only ONE)

- Talks about action when describing pictures 4
- Names people or objects when describing pictures 3
- Names familiar objects 2
- Asks for things by their appropriate names 1
- Is non-verbal or nearly non-verbal 0

B. Comprehension

16. Reading (Circle only ONE)

- Reads books suitable for children nine years or older 5
- Reads books suitable for children seven years old 4
- Reads simple stories or comics 3
- Reads various signs, e.g., "NO PARKING," "ONE WAY," "MEN," "WOMEN," etc. 2
- Recognizes ten or more words by sight 1
- Recognizes fewer than ten words or none at all 0

17. Complex Instructions
(Check ALL statements which apply)

- Understands instructions containing prepositions, e.g., "on," "in," "behind," "under," etc. _____
- Understands instructions referring to the order in which things must be done, e.g., "first do-- then do--" _____
- Understands instructions requiring a decision: "If-- , do this, but if not, do--" _____
- None of the above _____

C. Social Language Development

18. Conversation
(Check ALL statements which apply)

- Uses phrases such as "please," and "thank you" _____
- Is sociable and talks during meals _____
- Talks to others about sports, family, group activities, etc. _____
- None of the above _____

19. Miscellaneous Language Development
(Check ALL statements which apply)

- Can be reasoned with _____
- Obviously responds when talked to _____
- Talks sensibly _____
- Reads books, newspapers, magazines for enjoyment _____
- Repeats a story with little or no difficulty _____
- Fills in the main items on application form reasonably well _____
- None of the above _____

NUMBERS AND TIME

20. Numbers (Circle only ONE)

- Does simple addition and subtraction 5
- Counts ten or more objects 4
- Mechanically counts to ten 3
- Counts two objects by saying "one...two" 2
- Discriminates between "one" and "many" or "a lot" 1
- Has no understanding of numbers 0

21. Time (Check ALL statements which apply)

- Tells time by clock or watch correctly to the minute _____
- Understands time intervals, e.g., between "3:30" and "4:30" _____
- Understands time equivalents, e.g., "9:15" is the same as "quarter past nine" _____
- Associates time on clock with various actions and events _____
- None of the above _____

22. Time Concept

(Check ALL statements which apply)

- Names the days of the week _____
- Refers correctly to "morning" and "afternoon" _____
- Understands difference between day-week, minute-hour, month-year, etc. _____
- None of the above _____

VOCATIONAL ACTIVITY

23. Job Complexity (Circle only ONE)

- Can perform a job requiring use of tools or machinery, e.g., shop work, sewing, etc. 2
- Can perform simple work, e.g., simple gardening, mopping floors, emptying trash, etc. 1
- Can perform no work at all 0

24. Job Performance

(Check ALL statements which apply)

If "0" is circled in item 23, check "None of the above"

- Endangers self or others because of carelessness _____
- Does not take care of tools _____
- Is a very slow worker _____
- Does sloppy, inaccurate work _____
- None of the above _____

25. Work Habits

(Check ALL statements which apply)

If "0" is circled in item 23, check "None of the above"

- Is late for work without good reason _____
- Is often absent from work _____
- Does not complete jobs without constant encouragement _____
- Leaves work station without permission _____
- Grumbles or gripes about work _____
- None of the above _____

SELF-DIRECTION

A. Initiative

26. Initiative (Circle only ONE)

- Initiates most of own activities, e.g., tasks, games, etc. 3
- Asks if there is something to do, or explores surroundings, e.g., home, yard, etc. 2
- Will engage in activities only if assigned or directed 1
- Will not engage in assigned activities, e.g., putting away tools, etc. 0

27. Passivity

(Check ALL statements which apply)

- Has to be made to do things _____
- Has no ambition _____
- Seems to have no interest in things _____
- Finishes task last because of wasted time _____
- Is unnecessarily dependent on others for help _____
- Movement is slow and sluggish _____
- None of the above _____
- Does not apply, e.g., because he or she is totally dependent on others. _____

B. Perseverance

28. Attention (Circle only ONE)

- Will pay attention to purposeful activities for more than fifteen minutes, e.g., playing games, reading, cleaning up 4
- Will pay attention to purposeful activities for at least fifteen minutes 3
- Will pay attention to purposeful activities for at least ten minutes 2
- Will pay attention to purposeful activities for at least five minutes 1
- Will not pay attention to purposeful activities for as long as five minutes 0

29. Persistence

(Check ALL statements which apply)

- Becomes easily discouraged _____
- Fails to carry out tasks _____
- Jumps from one activity to another _____
- Needs constant encouragement to complete task _____
- None of the above _____
- Does not apply, e.g., because he or she is totally incapable of any organized activities. _____

C. Leisure Time

30. Leisure Time Activity

(Check ALL statements which apply)

- Organizes leisure time on a fairly complex level _____
- Has hobby, e.g., painting, embroidery, collecting stamps or coins _____
- Organizes leisure time adequately on a simple level _____

None of the above _____

RESPONSIBILITY

31. Personal Belongings (Circle only ONE)

- Very dependable--always takes care of personal belongings 3
- Usually dependable--usually takes care of personal belongings 2
- Irresponsibly takes care of personal belongings 1
- Not responsible at all--does not take care of personal belongings 0

32. General Responsibility (Circle only ONE)

- Very conscientious and assumes much responsibility--makes a special effort, the assigned activities are always performed 3
- Usually dependable--makes an effort to carry out responsibility; one can be reasonably certain that the assigned activity will be performed 2
- Unreliable--makes little effort to carry out responsibility; one is uncertain that the assigned activity will be performed 1
- Not given responsibility, is unable to carry out responsibility at all 0

SOCIALIZATION

33. Cooperation (Circle only ONE)

- Offers assistance to others 2
- Is willing to help if asked 1
- Never helps others 0

34. Consideration for Others
(Check ALL statements which apply)

- Shows interest in the affairs of others _____
- Takes care of others' belongings _____
- Directs or manages the affairs of others when needed _____
- Shows consideration for others' feelings _____
- None of the above _____

35. Awareness of Others
(Check ALL statements which apply)

- Recognizes own family _____
- Recognizes people other than family _____
- Has information about others, e.g., job, address, relation to self _____
- Knows the names of people close to him, e.g., classmates, neighbors _____
- Knows the names of people not regularly encountered _____
- None of the above _____

36. Interaction With Others (Circle only ONE)

- Interacts with others in group games or activity 3
- Interacts with others for at least a short period of time, e.g., showing or offering toys, clothing or objects 2
- Interacts with others imitatively with little interaction 1
- Does not respond to others in a socially acceptable manner 0

37. Participation in Group Activities
(Circle only ONE)

- Initiates group activities (leader and organizer) 3
- Participates in group activities spontaneously and eagerly (active participant) 2
- Participates in group activities if encouraged to do so (passive participant) 1
- Does not participate in group activities 0

38. Selfishness
(Check ALL statements which apply)

- Refuses to take turns _____
- Does not share with others _____
- Gets mad if he does not get his way _____
- Interrupts aide or teacher who is helping another person _____
- None of the above _____
- Does not apply, e.g., because he or she has no social interaction or is profoundly withdrawn. _____

39. Social Maturity
(Check ALL statements which apply)

- Is too familiar with strangers _____
- Is afraid of strangers _____
- Does anything to make friends _____
- Likes to hold hands with everyone _____
- Is at someone's elbow constantly _____
- None of the above _____
- Does not apply, e.g., because he or she has no social interaction or is profoundly withdrawn. _____

INDEPENDENT FUNCTIONING

A. Eating

40. Use of Table Utensils (Circle only ONE)

- Uses knife and fork correctly and neatly 6
- Uses table knife for cutting or spreading 5
- Feeds self with spoon and fork - neatly 4
- Feeds self with spoon and fork - considerable spilling 3
- Feeds self with spoon - neatly 2
- Feeds self with spoon - considerable spilling 1
- Feeds self with fingers or must be fed 0

41. Eating in Public (Circle only ONE)

- Orders complete meals in restaurants 3
- Orders simple meals like hamburgers or hot dogs 2
- Orders soft drinks at soda fountain or canteen 1
- Does not order at public eating places 0

*D. Appearance*42. Drinking (Circle only ONE)

- Drinks without spilling, holding glass in one hand 3
 Drinks from cup or glass unassisted - neatly 2
 Drinks from cup or glass unassisted considerable spilling 1
 Does not drink from cup or glass unassisted 0

43. Table Manners (Check ALL statements which apply)

- Swallows food without chewing _____
 Chews food with mouth open _____
 Drops food on table or floor _____
 Uses napkin incorrectly or not at all _____
 Talks with mouth full _____
 Takes food off others' plates _____
 Eats too fast or too slow _____
 Plays in food with fingers _____
 None of the above _____
 Does not apply, e.g., because he or she is bedfast, and/or has liquid food only _____

*B. Toilet Use*44. Toilet Training (Circle only ONE)

- Never has toilet accidents 4
 Never has toilet accidents during the day 3
 Occasionally has toilet accidents during the day 2
 Frequently has toilet accidents during the day 1
 Is not toilet trained at all 0

*C. Cleanliness*45. Washing Hands and Face
(Check ALL statements which apply)

- Washes hands with soap _____
 Washes face with soap _____
 Washes hands and face with water _____
 Dries hands and face _____
 None of the above _____

46. Bathing (Circle only ONE)

- Prepares and completes bathing unaided 6
 Washes and dries self completely without prompting or helping 5
 Washes and dries self reasonably well with prompting 4
 Washes and dries self with help 3
 Attempts to soap and wash self 2
 Cooperates when being washed and dried by others 1
 Makes no attempt to wash or dry self 0

47. Personal Hygiene

(Check ALL statements which apply)

- Has strong underarm odor _____
 Does not change underwear regularly by self _____
 Skin is often dirty if not assisted _____
 None of the above _____
 Does not apply, e.g., because he or she is completely dependent on others _____

48. Posture (Check ALL statements which apply)

- Mouth hangs open _____
 Head hangs down _____
 Stomach sticks out because of posture _____
 Shoulders slumped forward and back bent _____
 Walks with toes out or toes in _____
 Walks with feet far apart _____
 Shuffles, drags, or stamps feet when walking _____
 Walks on tiptoes _____
 None of the above _____
 Does not apply, e.g., because he or she is bedfast or non-ambulatory _____

49. Clothing (Check ALL statements which apply)

- Clothes do not fit properly if not assisted _____
 Wears torn or unpressed clothing if not prompted _____
 Rewears dirty or soiled clothing if not prompted _____
 Wears clashing color combinations if not prompted _____
 Does not know the difference between work shoes and dress shoes _____
 Does not choose different clothing for formal and informal occasions _____
 Does not wear special clothing for different weather conditions (raincoat, overshoes, etc.) _____
 None of the above _____
 Does not apply, e.g., because he or she is completely dependent on others _____

E. Care of Clothing

50. Care of Clothing

(Check ALL statements which apply)

- Wipes and polishes shoes when needed _____
 Puts clothes away neatly _____
 Not applicable to schools _____
 Hangs up clothes without being reminded _____
 None of the above _____

*F. Dressing and Undressing*51. Dressing (Circle only ONE)

- Completely dresses self (raincoat, overshoes, etc.) 5
 Completely dresses self with verbal prompting only 4
 Dresses self by pulling or putting on all clothes with verbal prompting and by fastening (zipping, buttoning, snapping) them with help 3
 Dresses self with help in pulling or putting on most clothes and fastening them 2
 Cooperates when dressed by extending arms or legs 1
 Must be dressed completely 0

52. Shoes (Check ALL statements with apply)

- Puts on shoes correctly without assistance _____
- Ties shoe laces without assistance _____
- Unties shoe laces without assistance _____
- Removes shoes without assistance _____
- None of the above _____

*G. Travel*53. Sense of Direction (Circle only ONE)

- Goes a few blocks from school ground without getting lost 3
- Goes around school ground without getting lost 2
- Goes around school room alone 1
- Gets lost whenever he leaves his own room 0

54. Public Transportation

(Check ALL statements which apply)

- Rides on train, long-distance bus or plane independently _____
- Rides in taxi independently _____
- Rides subway or city bus for unfamiliar journeys independently _____
- Rides subway or city bus for familiar journeys independently _____
- None of the above _____

*H. Other Independent Functioning*55. Telephone (Check ALL statements which apply)

- Uses telephone directory _____
- Uses pay telephone _____
- Makes telephone calls from private telephone _____
- Answers telephone appropriately _____
- Takes telephone messages _____
- None of the above _____

56. Miscellaneous Independent Functioning

(Check ALL statements which apply)

- Has ordinary control of appetite, eats moderately _____
- Knows postage rates, buys stamps from Post Office _____
- Looks after personal health, e.g., changes wet clothing _____
- Deals with simple injuries, e.g., cuts, burns _____
- Knows how and where to obtain a doctor's or dentist's help _____
- Knows about welfare facilities in the community _____
- None of the above _____

APPENDIX C

Teacher Questionnaire

Appendix C

Teacher Questionnaire

1. What are the goals for the students, of your school program?

2. Do you expect that _____ will have a job in the future?
yes_____ undecided_____ no_____

student

3. What type of job would _____ be most interested in?
student

4. What type of job would be most appropriate for _____?
student

5. Is there anything additional you feel could be included in the school program?

6. What is the parents' role in the present program?

7. What do you foresee that the parents' role in the program could be?

Please add any additional comments that you wish to make. If more space is required, please use the back of the page.

APPENDIX D

Parent Questionnaire

Appendix D

Parent Questionnaire

1. Do you expect that your daughter or son will have a job at some point in the future?

yes_____ no_____ undecided_____

2. What type of job would your child be most interested in?

3. What type of job do you feel would be most appropriate for your son or daughter?

4. Do you feel job training should be part of the school program?

yes_____ no_____ undecided_____

5. What would you like to see included in the school program?

6. Are you presently involved with the school program?
If so, in what way?

7. What role do you feel parents should play in the school program?

Please add any additional comments that you wish to make. If more space is required, please use the back of the page.

APPENDIX E
Transcription of Tape 1

Appendix E

Transcription of Tape 1

E: This is not a test. There are no right answers and no wrong answers. Your answers will tell me about the kind of work you like best. On every page of the book there are groups of pictures in a row, just like this. I want you to tell me the job you like best. For this one, if you liked raking leaves best, you would tell me and I'll make a mark on it. You can only choose one picture, so pick the one you like best. You might like all three pictures, but you can only pick one. If you don't like any of the pictures, choose the one you would like for just a little while. Okay?

S: Yeah

E: Let's try these. Of these pictures, which job would you like to do best?

S: (pointed)

E: This one?

S: Nodded

E: Okay, now which of these three jobs would you like best to do?

S: (pointed)

E: Okay, good. Now, of those which would you like to do?

S: (pointed)

E: Good. The next one?

S: (pointed)

E: How about this row? Which one would you like best to do?

S: (pointed)

E: Okay, the next one?

S: (pointed)

Continued with examiner indicating rows and student pointing with no conversation.

E: Which of these jobs would you like?

S: (pointed) E: How about this row?

S: (pointed)

E: And here?

S: (pointed)

E: Which of these jobs would you like?

S: (pointed)

E: And these ones?

S: (pointed)

E: Good. This row?

S: (pointed)

E: This row?

S: (pointed) E: On the next page, which of these things would you like to do?

S: (pointed)

E: Okay, how about here?

S: (pointed)

E: And in this row?

S: (pointed)

Continued with no conversation.

E: Okay, good. How about this row?

S: (pointed)

E: On this page, which job would you like best?

S: (pointed)

E: In this row?

S: (pointed)

E: Which of these jobs would you like to do?

S: (pointed)

E: And of these?

S: (pointed)

E: One more page. Which of these would you like to do?

S: (pointed) E: Okay, thanks Andrew.

APPENDIX F

Transcription of Tape 2

Appendix F

Transcription of Tape 2

E: This isn't a test.

S: What is it?

E: Well, there's no right answers....

S: (pointed)

E: Oh, that's a tape recorder Is it moving?

S: Yeah. Here, I'll get it to move.

E: No, its just good the way it is. You can shut it off when we're done, how's that?

S: Why do you need it on?

E: Just because I want to hear. Okay?

S: Its not moving.

E: Yes, it is. You can shut it off when we're finished, okay?

S: Its not playing anything.

E: That's because there's nothing on it to hear.

S: But what if we leave it on, though?

E: Okay, I want you to look here. This isn't a test.

S: So, why do you leave it on?

E: So it can hear us. I'll play it back to you and you'll be able to hear us.

S: Oh.

E: Okay? Like I said, this is not a test, there's no right answers and there's no wrong answers. Your answers will just tell me about the kind of work you like best. I'm going to show you some pictures and in every row there's three pictures. I want you to pick the job that you would like to do best. And then tell me, or just point to the one that you like.

S: I can only pick one?

E: Just one. Like here, if I showed you these three pictures and you liked to rake leaves, you just point to it and I'll mark it. Now, if you like all three pictures, you still have to pick the one that you like best. And maybe in some of the pictures, you might not like any of those things, but I still want you to pick one that if you had to do, you would do. Okay? Let's try one. I want you to look at these pictures here.

S: Why don't we start with these ones?

E: That's just an example, to show us how to do it. Let's look at these three jobs. Which of those jobs would you like to do best?

S: (pointed)

E: This one? Good. Now, of these jobs which one would you like to do?

S: (pointed)

E: Okay, how about here?

S: This one.

E: Okay. Can you find which one of these you'd like to do best?

S: Yeah. (pointed)

E: Picking apples? Okay, how about of these three?

S: What are they doing here?

E: I think they're pressing clothes. Like at a dry cleaners.

S: What here?

E: What are they doing here? What does it look like they're doing?

S: I don't know.

E: She's working on parcels, like at the post office.

S: (pointed)

E: You'd like to press clothes, okay.

S: I'll turn them.

E: You want to turn the page. Don't lost the pag...Oh, I see you want to turn it like this.

S: Yeah, after we're done.

E: Okay, which of these jobs would you like to do?

S: Feed chickens.

E: Feed chickens?

E: How about these?

S: (pointed)

E: Okay, do you want to fold it over and we'll look at the
next page?

S: (unintelligible)

E: And of these jobs, which would you like to do?

S: What are they doing there, anyway?

E: Which one?

S: There.

E: What does it look like he's doing there?

S: Sawing.

E: Sawing. And what's he doing here?

S: I don't know.

E: I think he's opening the door for the man. And what's he
doing here?

S: Pouring water, I think.

E: No, what are these?

S: Clothes.

E: Clothes. He's putting the clothes in the washing machine.
So, which one would you like to do of those?

S: Wash the....no...

E: That's okay. You're really thinking, aren't you? Can you pick one?

S: Just hold one.

E: Okay.

S: Laundry.

E: Laundry, okay. How about of these ones, which one would you pick?

S: What is she doing here?

E: She's packing irons into a box. Working on a car, and what is she doing here?

S: Watering.

E: Collecting garbage, I think.

S: (unintelligible)

E: This one?

S: Yeah.

E: Okay, and which of these would you like to do?

S: (pointed)

E: This one?

S: No, not that.

E: No?

S: (unintelligible)

E: She's cleaning the tables, yeah.

S: This.

E: You'd like to do this one, okay. How about of these pictures?

S: Milking.

E: What?

S: Milking.

E: You'd like to milk the cow, all right. Okay...

S: Can I mark them?

E: Can you what?

S: Mark them?

E: Sure. Okay, which of those three would you like to do?

S: (NR)

E: Can you mark the one that you'd like to do best?

S: (Marked it)

E: That one. How about the next row?

S: Oh,...

E: That's a good mark. As long as I can tell. That's fine.
How about the next one.

S: (marked one)

E: You don't even need me here, you're doing it all
yourself. How about this top row?

S: (marked one)

E: And in the next row, which would you like to do?

S: What is she doing here?

E: She's packing a box.

S: Where?

E: Ready to be mailed, I think.

S: Marked one.

E: I thought you might pick that one.

S: How did you know?

E: I just thought maybe you might.

S: I thought...I wonder...

E: You wonder what? Oh, let's do these before we go on to
the next ones so that we don't miss any. There you
go. Okay, you've done those, let's try this page.

S: What's she doing here?

E: She's setting the table.

S: Guess what I've got in my lunch? Cake.

E: You've got cake in your lunch? Oh, boy, aren't you lucky.
What kind of cake?

S: Chocolate cake. Chocolate cake with...oh, what's it
called... that icing.

E: Umm, delicious.

S: Pink icing.

E: Oh, boy. Did somebody make it for you or did you buy it?

S: Somebody made it. My grandmother made it.

E: Boy, you're sure lucky.

S: I decorated it myself.

E: You did?

S: Yeah.

E: Oh

S: What's she doing again?

E: Setting the table. She's putting the cloth on the table
so she can set it...So, which one of those would you
like to do?

S: What's she shovelling? Dirt out?

E: I think so, or hay in.

S: (made a face)

E: That doesn't look like a very pleasant job, does it?

S: What is he doing here?

E: Fixing the chair. So, if you had to do one of those for a little while, which one would you do?

S: (marked one)

E: Okay, good.

S: Did you think I'd pick that one?

E: I didn't know. I wasn't sure. How about this row?

S: What's he doing here? Pouring milk.

E: Well, actually its what this person is doing, yes. That's in the hospital and he's giving the patient some water.

S: What's he doing?

E: It would be this person, he's the driver of the car.

S: (marked one)

E: Okay, which one there do you think you'd like to do?

S: (marked one)

E: That one? Okay. How about the next row?

S: Is she packing dishes away?

E: I guess she's running the dishwasher.

S: And here she's putting the cast on?

E: Or, she's shaving him, helping him.

S: (marked one)

E: Good. Which one here do you like?

S: (NR)

E: Can you find a job there you'd like to do?

S: (marked one)

E: Now, how about the top row? Can't miss any.

S: How come?

E: Because I want you to pick one in every row even if you
don't care for them very much.

S: (unintelligible)

E: Yes, that's right.

S: And she's pressing clothes.

E: Right, and he's carrying a box.

S: (marked one)

E: Good.

Long Pause

E: And this one? What do you think she's doing?

S: Making salad.

E: That's right.

Continued with no conversation.

S: Is she taking stuff off the sheep?

E: Yes.

S: How come?

E: Because that's...do you know what this is called?

S: Um...coats

E: That's wool. They use it to make things, so they shave it
of the sheep.

S: Do they always do that?

E: Yes

S: They don't do it every day.

E: No.

S: How come?

E: Because it doesn't grow that fast. That's like your hair,
you couldn't cut your hair everyday, could you?

S: (shrugged)

E: Okay, what's she doing here?

S: Ironing.

E: Ironing. And this one?

S: Putting food into the frigerator.

E: Right, so which one would you like to do?

S: (marked one)

E: And in the next row?

S: (unintelligible)

E: That's right. And the next one?

Interrupted.

E: Okay, the next row.

S: Here's she's doing laundry and here she's washing the
sheets.

E: Right, so which one would you do?

S: (NR)

E: Is it a hard choice?

S: (marked one)

E: Was that hard because you liked them all, or because you
didn't like any of them?

S: I liked them.

E: You liked them all.

S: What's she doing? Serving?

E: Right.

Tape ran out. Didn't notice immediately.

E: Okay, we've got lots more to do here so let's try and get them done.

S: What do you mean we've got lots more to do?

E: We've got to finish this booklet. Okay, where are we?
Let's try this row.

S: One...two...three...four...just wait I'm trying to...

E: We've got to...

S: I know I'm counting.

E: Well, we'll count them as we go.

S: (unintelligible)

E: Okay, let's do this row.

S: (unintelligible)

E: What do you think they're here for? We'll see if we can find some when we're finished, okay? Be careful you don't lose it.

S: Do you have some tape? (She wanted to glue her ring)

E: I don't have any with me, no.

S: You don't have any here?

E: No

S: Let's see if there's any here. (Started opening desk drawers)

E: This isn't my desk. There's nothing in here.

S: What do you got under there? Papers? Looseleaf?

E: Okay, let's try and get this finished and then we'll see if we can find some tape, or some glue.

S: (marked one)

E: Good. Okay, now which of these?

S: Here's parking....(unintelligible)

E: Right

S: And...on the truck.

E: Right. So, which one would you do?

S: (marked one)

E: Good. Next one?

S: Putting sheep in the thing.

E: Right.

S: Vacuuming

E: Umhummm.

S: And cutting paper.

E: Right, so which one would you do?

S: (marked one)

E: Okay, good.

E: Next page.

S: This don't...

E: That's a good mark...as long as I can tell which one.

S: (unintelligible)

E: Okay.

S: (marked a few)

E: Very good. Which ones here?

S: (marked one)

E: Next row? Oh, did you get ink on you? You can wash your hands when we go back.

S: There. She's putting sheets in the basket.

E: Right

S: Here washing dishes....

E: Okay

S: She's...(unintelligible)...and she's picking up leaves

E: Right, so which one would you like to do?

S: (marked one)

E: And in the next row, which one would you like to do there? Mark the one you'd like to do.

S: (marked one)

E: Good, and the top row, which one would you like to do there?

S: (marked one)

E: Good, and the next row?

S: (marked one)

E: Good. Okay, and the top row?

S: He's setting tables.

E: Right, is that what you'd like to do?

S: (marked one)

E: Okay, which one...

S: I was...crutches...terrible.

E: It is terrible being on crutches.

S: I was in a cast.

E: What did you do, break your leg?

S: No, my foot.....

E: Oh, my goodness, did you fall?

S: I hurt my ankle down the steps...the pig was chasing me...around the pen

E: The pig was chasing you?

S: It chased me and I didn't like that...

E: I guess not.

S: ...It wasn't nice...

E: Okay, let's look at this row and see which job you'd like to do.

S: Is that for...

E: That's for the next person.

S: Norman

E: Yes. He hasn't done this yet.

S: How come?

E: Come on, we're looking at this row.

S: He's washing clothes, folding...(marked one)

E: Good, next page.

S: He didn't...did he?

E: No. Now, which one here would you like to do?

S: (marked one)

E: Very good, and the next one?

S: (marked one)

E: Good. Which one there would you like to do?

S: Not there, I could get bit.

E: That's right, you could get bit working with animals.

S: What's she doing, going to sleep?

E: I would say there's something wrong with him and they're going to fix him up.

S: Why does it say go to the next page?

E: Well, when you're finished here you go on to the next page, that's what it means.

S: There's one on every page.

E: There's one on every page, yeah. That means you're not finished yet.

S: Oh, boy...Do we have to write after this?

E: Okay, you look at these pictures.

Interrupted.

E: Okay, try the bottom row, which one would you do there?

S: (marked one)

E: And this next one?

S: (marked one)

E: Okay

S: (marked one)

E: Good, and the next row?

S: What are they doing here?

E: Which one?

S: (pointed)

E: I think he's fixing tires.

S: For the cars?

E: Right.

S: Putting boxes into people's houses. (marked one)

E: Okay, good.

S: (marked one)

E: Good.

S: (marked one)

E: Good, and one more page.

S: Yep....(unintelligible)

E: What does it say here?

S: Stop.

E: That means you're finished.

S: Then what?

E: Back to class.

S: Don't I have to do any more?

E: No, that's all. Maybe you can help me talk Dean into coming. He doesn't want to come. But, maybe when he sees that you did it, he'll come.

S: I think I'll work on...

E: Okay, let's finish these first.

S: (marked one)

E: Very good. And the last one, which of those jobs would you like to do?

S: He's building a house.

E: That's right, and what's he doing?

S: Nails and rabbits.

E: That's it.

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